

ECONOMIC PROFILE: NORTHERN SACRAMENTO VALLEY REGION



Prepared for the



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California Economic Strategy Panel

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PREFACE

The California Economic Strategy Panel (Panel) continuously examines changes in the state's economic base and industry sectors to develop a statewide vision and strategic initiatives to guide public policy decisions for economic growth and competitiveness (see www.labor.ca.gov/panel/). The fifteen-member Panel is comprised of eight appointees by the Governor, two appointees each by the President pro Tempore and the Speaker and one each by the Senate and Assembly Minority Floor Leaders. The Secretary of the California Labor & Workforce Development Agency serves as the Chair.

The Panel first identified California's economy as an economy of regions in 1996. At that time, the Panel also adopted a new way of looking at industry sectors and how they function and grow as industry clusters. These new ways of looking at the economy became the basis for the analytical work completed then, and have provided a foundation for the Panel's work since that time.

The California Regional Economies Project is currently the lead research mechanism for the Panel to identify economic policy issues. The project provides the state's economic and workforce development systems with data and information about changing regional economies and labor markets. The information provides a new resource in economic and workforce development planning and investment decisions and a bridge connecting economic and workforce policies and programs at the state and regional levels.

In order to understand the state's economy and the changes taking place within industry sectors and industry clusters, it is important to recognize the regional nature of the economy and to analyze the economic base by region. To do this, the statewide and nine regional economic base reports analyze the patterns of employment, business establishments, wages, population, unemployment rate and other key factors.

This report presents an in-depth analysis of the Northern Sacramento Valley Region from 2001 to 2005. The statewide and eight other regional economic base reports are also available at www.labor.ca.gov/panel/. Previous economic base reports examined the 1990-2002 and the 2001-2004 periods. The earlier reports were the first economic base reports for the regional economies as they are defined today. The Panel's initial work, from 1994-1996, resulted in identification of six regions and provided regional economic base analyses; however, those regions had been significantly redefined by 1998, making comparisons to the early analyses impractical.

The source of the data used for these reports is the official employment and wage information reported by employers to the State. While a variety of other sources provide similar information, they may not capture the official numbers that employers report, or may not include input from all employers. This data source is the most comprehensive and accurate source of information direct from employers, and is therefore the best to use for public policymaking, planning and program administration.

The Panel has taken steps to institutionalize the analysis and preparation of these economic base reports within State government so that this analysis may be provided on a yearly basis.

Also, steps have been taken to leverage the body of knowledge that now exists around the study of industry clusters, gained through the California Regional Economies Project.

First, a non-confidential version of the data series, the *California Regional Economies Employment Series*, has been made available online by the California Employment Development Department's Labor Market Information Division (LMID) so that regional organizations may access this data at the county level. Second, a step-by-step guide, the *Industry Clusters of Opportunity User Guide*, is available online so that regional organizations can conduct industry cluster studies and work with business and industry to test and apply the findings. With this information, regional organizations may conduct their own economic base and industry cluster analyses down to the county level, and they may combine county data to create their own subregional study areas. Training workshops are being held to teach the methodology and processes outlined in the *Industry Clusters of Opportunity User Guide* to representatives from Local Workforce Investment Boards, economic development organizations, the Employment Training Panel, LMID, educational institutions and programs including Community Colleges and Regional Occupational Programs, and other local jurisdictions.

The statewide and regional economic base reports, the *Industry Clusters of Opportunity User Guide* and other studies are available on the Panel's website at www.labor.ca.gov/panel/espcrep.htm.

The California Regional Economies Employment Series is available online at www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=173.

The California Regional Economies Project is sponsored by the California Labor & Workforce Development Agency, California Employment Development Department, California Workforce Investment Board and the California Community Colleges Chancellor's Office.

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INTRODUCTION

The California Regional Economies Project provides data and information about changing regional economies and labor markets. The information provides a new resource in economic and workforce development planning and investment decisions, and a bridge connecting economic and workforce policies and programs at the state and regional levels.

In order to understand the state's economy and the changes taking place within industry sectors and industry clusters, it is important to recognize the regional nature of the economy and to analyze the economic base by region. To do this, the statewide and nine regional economic base reports analyze the patterns of employment, business establishments, wages, population, unemployment rate and other key factors.

This report presents an in-depth analysis of the Northern Sacramento Valley Region's economy from 2001 to 2005. The previous economic base reports examined the 1990-2002 and the 2001-2004 periods. The statewide and eight other regional economic base reports are also available at www.labor.ca.gov/panel/.

Data Sources

The Quarterly Census of Employment and Wages (QCEW) data is the source for the private industry data, which uses the North American Industry Classification System (NAICS) coding system. The Current Employment Statistics (CES) data is the source for all levels of government employment data. The CES data does not offer wage information, so the government wage information in this report was taken from the federal Bureau of Labor Statistics (BLS) QCEW non-confidential data available online. A more detailed explanation of the data sources is available in the statewide report.

Industry Clusters versus Sectors

An industry sector is a group of firms that are doing the same type of work, making the same type of products, or providing the same types of services. Examples include manufacturing, construction, retail trade and health care.

An industry cluster is a group of interdependent industry sectors characterized by competing firms and buyer-supplier relationships, as well as shared labor pools and other specialized infrastructure. They are also geographically concentrated. When identifying "industry clusters of opportunity," the Project adds additional considerations that focus on employment opportunities for regional residents.

Definition of the Economic Base Industries

Economists divide industries into two groups; export-oriented and local-serving (also referred to as population-driven). Export-oriented industries are industries that sell a large portion of their goods and services to people and businesses in markets outside of the region, creating capital (bringing capital into) the region. Local-serving industries are industries that sell their

goods and services to people and businesses in markets within the region. These industries do not typically create new capital for the region, but recirculate it within the region.

In the economic base reports completed in 2004, the two principal researchers who provided the analyses did not agree on a common definition of an area's economic base. One favored the traditional approach, while the researcher analyzing the rural regions felt that there were key local-serving industries that were critical to these rural regions and should be included in the economic base.

For the economic base reports completed in 2006, we chose to include some industries in our definition of the economic base that are not traditionally included. We acknowledged that this use of the term, "economic base," conflicted with the standard definition, and that we chose to redefine it for the purpose of those reports. We promised to revisit this issue, and have done so for the current reports.

The current reports begin with an overview of the economy and all major industry sectors. Next, we provide an analysis of the economic base. In order to recognize and reconcile past researchers' differences regarding the definition of the economic base, we have chosen to use the traditional definition of economic base for this section (as found in the economic base reports produced in 2004 for the urban regions) and to then follow it with a separate section that provides an in-depth analysis of other key industries and industry clusters that are also important to the region's economy – drawing from the reasoning behind the expanded definitions of the economic base used in some of the past reports. We do this in order to incorporate the traditional approach in a meaningful way for those who prefer that approach, while recognizing the importance of seeking alternative ways to view the economy.

A detailed discussion of the definition of the economic base and the differences between the previous and current reports is available in the statewide report.

Manufacturing

Manufacturing is a cornerstone of the economy. Changes in employment within Manufacturing are closely monitored. Therefore, it is important to note that the employment counts reported for Manufacturing may be impacted by two key factors.

First, some Manufacturing firms may report all of their employment in a given location as manufacturing, while not all of the work actually being done at that location is manufacturing. (This may be true for other industries, as well.) Firms are encouraged to report employment under multiple industry codes in order to most accurately capture the type of employment; however, this is somewhat at the firm's discretion.

Second, there is a growing percentage of manufacturing jobs being filled by the Employment Services industry,* suggesting that Manufacturing firms are relying more heavily on the use of temporary workers. These workers are reported as employees of the Employment Services firm, thus affecting the count of manufacturing jobs.

* US Department of Labor, Bureau of Labor Statistics, Career Guide to Industries: Employment Services

THE NORTHERN SACRAMENTO VALLEY REGION



The Northern Sacramento Valley Region includes five counties — Butte, Colusa, Glenn, Shasta and Tehama. This region accounts for 1.1% of California's jobs and 1.4% of its population. The region's unemployment rate in 2005 was 7.1%. This region had the second highest unemployment rate of the nine regions, well above the state average of 5.4%. Only the San Joaquin Valley Region had a higher unemployment rate.

From 1990 to 2003, the Northern Sacramento Valley Region experienced job growth of 25%, as reported in the first economic base report. Since the recent recession, from 2001 to 2005, job growth has continued, increasing by 3.8%; private industry jobs increase by 4% and Government jobs increased by 3.3%. During this time, the region's population grew by 5.7%.

The Northern Sacramento Valley Region ranked sixth in employment growth among the nine regions for this period, and third in population growth.

Figure 1 Characteristics of the Northern Sacramento Valley Region

| Characteristics of the Northern Sacramento Valley Region | | | | | | | | |
|--|---------------------------------|----------------------|-------|--|--|--|--|--|
| (Numbers are in thousands, except for dollar amounts) | | | | | | | | |
| | Northern | | | | | | | |
| | Sacramento California Valley | | | | | | | |
| Population (2005) | 502.6 | 36,154 | 1.4% | | | | | |
| Labor Force (2005) | 239 | 17,696 | 1% | | | | | |
| Unemployment Rate (2005) | 7.1% | 5.4% | 132% | | | | | |
| Private Sector Jobs (2005) | 137.8 | 12,828 | 1.1% | | | | | |
| Manufacturing Jobs* (2005) | 10.6 | 1, 4 98.7 | 0.7% | | | | | |
| Per Capita Income (2005) | \$ 26,948 | \$ 36,936 | 73% | | | | | |
| Average Wage (2005) | \$ 29,003 | \$ 45,686 | 63.5% | | | | | |

Source: Jobs, Labor Force, Unemployment Rate and Average Wage – California Employment Development Department, Labor Market Information Division; Population and Per Capita Income – U.S. Bureau of Economic Analysis

 $^{^{*}}$ Manufacturing Jobs reported here are traditional production jobs (NAICS 31-33).

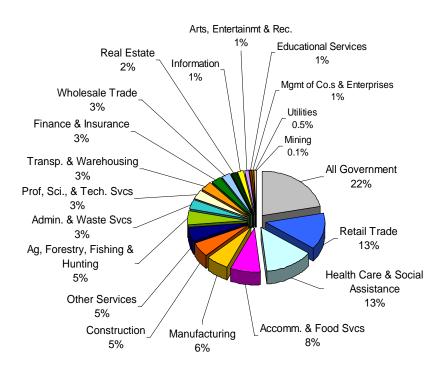
Employment Size

All Government provides the largest number of the region's jobs, with 38,200 jobs in 2005, or 21.7% of all jobs in the region. All Government reported 3.3% growth from 2001 to 2005. Within All Government, the largest sub-sector is Local Government, with 29,760 jobs in 2005.

The second largest sector is Retail Trade, providing over 23,400 jobs, or 13.3% of all jobs in the region. Retail Trade reported job growth of 6.9% from 2001 to 2005. The largest sub-sector within Retail Trade is Food & Beverage Stores, followed by General Merchandise Stores.

The third largest sector is Health Care & Social Assistance, with 23,400 jobs (13.3% of all jobs in the region), followed by Accommodation & Food Services (8.3% of all jobs), Manufacturing (6% of all jobs), Construction (5.5%), and Other Services (5.3% of all jobs). **Figure 2** shows employment distribution across the major industry sectors.

Figure 2 Employment Distribution



Of the 20 major sectors, nine reported job gains from 2001 to 2005. The sector reporting the greatest number of jobs gained was Construction, up almost 2,100 jobs. This was followed by Retail Trade, up over 1,500 jobs; Health Care & Social Assistance, up almost 1,500 jobs; and, Professional, Scientific & Technical Services, up over 1,300 jobs.

Growth Rate

Professional, Scientific & Technical Services reported the strongest employment growth from 2001 to 2005, based on percentage of growth, at 29.4%, for an average annual growth rate (AAGR) of 6.7%. The second greatest job growth was reported by Construction, up 27.3% from 2001 to 2005, for an AAGR of 6.2%. This was followed by Finance & Insurance, up 18.9% (4.4% AAGR), and Wholesale Trade, up 17% (4% AAGR). Growth for all industry sectors may be found in **Figure 3**.

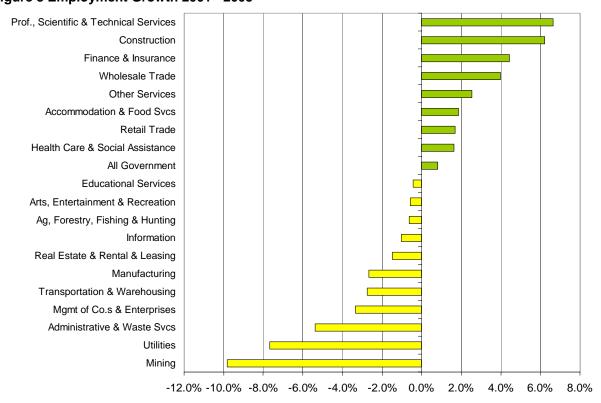


Figure 3 Employment Growth 2001 - 2005

Concentration or Competitive Advantage

The concentration of jobs in an industry in a region, compared to the concentration at the state level, is another indicator of an industry's importance to the region's economy. A concentration level higher than 1.0 may indicate that the region has a competitive advantage in that industry; it may also indicate that the goods and services being produced are being consumed outside of the region.

In the Northern Sacramento Valley Region, at the major sector level, Agriculture, Forestry, Fishing & Hunting reported the highest concentration in 2005, at 2.1. Next were Health Care & Social Assistance (I.6 LQ), and All Government (I.4 LQ). Later in this section, the concentration will be presented for the industry group level (3-digit NAICS code level), which will reveal more in-depth information on important industries. The concentration for the ten largest industries is included in **Figure 4**.

Comparing Size, Growth and Concentration

The bubble chart in **Figure 4** shows employment change from 2001 to 2005 for the region's ten largest industry sectors (based on employment size). This type of chart displays three important criteria in one chart – employment size, growth rate and concentration.

Interpreting the chart:

- The size of the bubble represents the employment size of the industry.
- The position from left to right indicates the employment change to the left of zero means job losses, and to the right means job growth. The average annual growth rate (AAGR) is graphed as a percentage.
- The vertical position indicates the concentration of the industry in the region; the higher the bubble, the greater the concentration. A concentration greater than 1.0 means the region has a higher concentration of jobs in that industry than is found statewide. Industries highly concentrated in a region are important to the region, even if they are not the largest in employment size.

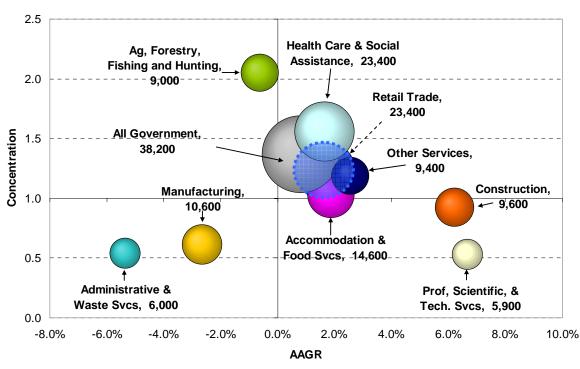


Figure 4 Size, Growth and Concentration of the Ten Largest Industries

For the ten largest industry sectors:

- All Government was the largest sector, with a higher concentration than statewide.
- Agriculture, Forestry, Fishing & Hunting had the highest concentration, followed by Health Care & Social Assistance.
- o Professional, Scientific & Technical Services and Construction reported the fastest growth rates.
- Seven of the ten largest sectors reported job growth from 2001 to 2005.
- Administrative & Waste Services reported the highest percentage of job losses, followed by Manufacturing.

Average Wages

Another important factor to consider is how well an industry pays. In 2005, the average annual wage across all private industries in the Northern Sacramento Valley Region was \$29,003, compared to the statewide average of \$45,686. The Northern Sacramento Valley Region ranked seventh among the nine economic regions.

At the major sector level, the highest average annual wage of \$72,561 was reported by Utilities, followed by Mining (\$53,528) and Management of Companies & Enterprises (\$47,194). The lowest, \$12,018, was reported by Accommodation & Food Services. The average annual wage in the government sector – the region's largest employer – was \$34,604. **Figure 5** compares 2005 employment with the average annual wages reported by each industry sector.

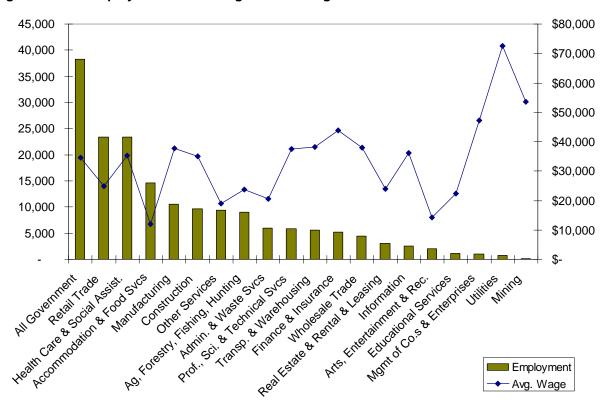
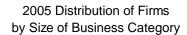


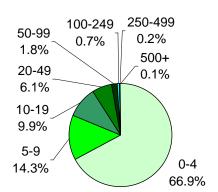
Figure 5 2005 Employment and Average Annual Wages

Size of Business

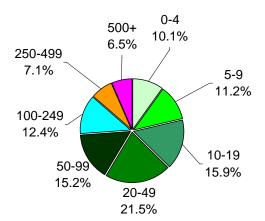
From 2001 to 2005, the percentage of businesses with fewer than 100 employees remained constant within the region at 98.9% in 2001 and 99.0% in 2005. The businesses with fewer than 100 employees provided 73.9% of all private industry jobs in 2005. In contrast, just 1% of all businesses in the Northern Sacramento Valley Region employ 100 or more workers, and these businesses provide 26.1% of the region's private sector jobs.

Figure 6 Distribution of Firms and Jobs by Size of Business in 2005





2005 Employment by Size of Business Category



Businesses with fewer than 50 employees provided 58.7% of all private industry jobs in 2005. Looking at the smallest firms, those with fewer than 10 employees provided 21.3% of all private industry jobs. Other Services reported the highest percentage of businesses with fewer than 100 employees, at 99.9%. Manufacturing reported the lowest percentage, at 96.7%. (Some size-of-firm data was suppressed due to confidentiality, which affects the percentages reported.)

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Figure 7 provides a summary of economic facts for all of the industry sectors.

Figure 7 Industry Composition in 2005

| | | | Avg. | | | | |
|-------|------------------------------------|---------|--------|------|-----------|------------|------------|
| | | % of | Annual | | Avg. | Firms with | Firms with |
| | | Employ- | Growth | 2005 | Annual | less than | less than |
| NAICS | Major Industry Sector | ment | Rate | LQ* | Wage | 100 empl** | 50 empl** |
| 11 | Ag, Forestry, Fishing & Hunting | 5.1% | -0.6% | 2.1 | \$ 23,776 | 99.3% | 97.3% |
| 21 | Mining | 0.1% | -9.8% | 0.7 | \$ 53,528 | 92.9% | 92.9% |
| 22 | Utilities | 0.5% | -7.7% | 1.2 | \$ 72,561 | 93.5% | 91.3% |
| 23 | Construction | 5.5% | 6.2% | 0.9 | \$ 35,115 | 99.8% | 98.5% |
| 31-33 | Manufacturing | 6.0% | -2.7% | 0.6 | \$ 37,709 | 95.0% | 88.7% |
| 42 | Wholesale Trade | 2.5% | 4.0% | 0.6 | \$ 37,943 | 99.7% | 96.9% |
| 44-45 | Retail Trade | 13.3% | 1.7% | 1.2 | \$ 24,907 | 98.0% | 94.0% |
| 48-49 | Transportation & Warehousing | 3.2% | -2.8% | 1.2 | \$ 38,122 | 96.9% | 94.7% |
| 51 | Information | 1.4% | -1.0% | 0.5 | \$ 36,266 | 96.7% | 92.1% |
| 52 | Finance & Insurance | 2.9% | 4.4% | 0.7 | \$ 43,772 | 99.0% | 98.4% |
| 53 | Real Estate & Rental & Leasing | 1.7% | -1.5% | 0.9 | \$ 23,901 | 98.8% | 97.8% |
| 54 | Prof., Scientific & Technical Svcs | 3.3% | 6.7% | 0.5 | \$ 37,514 | 99.6% | 99.1% |
| 55 | Management of Co.s & Enterprises | 0.6% | -3.4% | 0.4 | \$ 47,194 | 96.7% | 90.0% |
| 56 | Administrative & Waste Services | 3.4% | -5.4% | 0.5 | \$ 20,561 | 97.1% | 93.8% |
| 61 | Educational Services | 0.6% | -0.4% | 0.4 | \$ 22,357 | 97.7% | 96.5% |
| 62 | Health Care & Social Assistance | 13.3% | 1.6% | 1.6 | \$ 35,248 | 97.5% | 94.1% |
| 71 | Arts, Entertainment, & Recreation | 1.1% | -0.6% | 0.7 | \$ 14,325 | 98.6% | 92.5% |
| 72 | Accommodation & Food Services | 8.3% | 1.9% | 1.0 | \$ 12,018 | 99.2% | 94.0% |
| 81 | Other Services | 5.3% | 2.5% | 1.2 | \$ 18,979 | 99.9% | 99.8% |
| | All Government | 21.7% | 0.8% | 1.4 | \$ 34,604 | N/A | N/A |
| * 1.0 | | | | | | | |

^{*} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{**} Some size of firm data was suppressed due to confidentiality.

Figure 8 shows the rankings for all major industry sectors in four important areas; employment size, growth rate, concentration and wages.

_ _ _ _

Figure 8 Rankings

| | | Employmt | | 2005 | Avg. |
|-------|--|-------------|-------|------|------|
| NAICS | Major Industry Sector | Size (2005) | AAGR* | LQ** | Wage |
| 11 | Agriculture, Forestry, Fishing & Hunting | 8 | 12 | 1 | 15 |
| 21 | Mining | 20 | 20 | 13 | 2 |
| 22 | Utilities | 19 | 19 | 4 | 1 |
| 23 | Construction | 6 | 2 | 9 | 11 |
| 31-33 | Manufacturing | 5 | 15 | 14 | 7 |
| 42 | Wholesale Trade | 13 | 4 | 15 | 6 |
| 44-45 | Retail Trade | 2 | 7 | 5 | 13 |
| 48-49 | Transportation & Warehousing | 11 | 16 | 7 | 5 |
| 51 | Information | 15 | 13 | 18 | 9 |
| 52 | Finance & Insurance | 12 | 3 | 12 | 4 |
| 53 | Real Estate & Rental and Leasing | 14 | 14 | 10 | 14 |
| 54 | Prof., Scientific, & Technical Services | 10 | 1 | 17 | 8 |
| 55 | Management of Co.s & Enterprises | 18 | 17 | 20 | 3 |
| 56 | Administrative & Waste Services | 9 | 18 | 16 | 17 |
| 61 | Educational Services | 17 | 10 | 19 | 16 |
| 62 | Health Care & Social Assistance | 3 | 8 | 2 | 10 |
| 71 | Arts, Entertainment, & Recreation | 16 | 11 | 11 | 19 |
| 72 | Accommodation & Food Services | 4 | 6 | 8 | 20 |
| 81 | Other Services | 7 | 5 | 6 | 18 |
| | All Government | 1 | 9 | 3 | 12 |

^{*} AAGR – Average Annual Growth Rate

Private Industry Sub-sectors and Industry Groups

While it is important to understand the economy at the major sector level, additional insight may be gained by looking at the sub-sector level, across all sectors. In the NAICS coding system, the three-digit level is the sub-sector level, and the four-digit level is the industry group level. The following explores the three- and four-digit levels in order to look within the major sectors to see specific sub-sectors and industry groups reporting significant employment, concentration and growth.

The ten largest sub-sectors (based on their employment size in 2005) provide 36.8% of the region's jobs:

- → Food Services & Drinking Places (NAICS 722) provides 7.5% of the jobs;
- → Ambulatory Health Care Services (NAICS 621) provides 4.8% of the jobs;
- → Hospitals (NAICS 622) provides 3.8% of the jobs;
- → Specialty Trade Contractors (NAICS 238) provides 3.5% of the jobs;
- → Professional, Scientific & Technical Services (NAICS 541) provides 3.3% of the jobs;
- → Administrative & Support Services (NAICS 561) provides 3.2% of the jobs;
- → Crop Production (NAICS 111) provides 2.8% of the jobs;
- → Nursing & Residential Care Facilities (NAICS 623) provides 2.8% of the jobs;
- → Food & Beverage Stores (NAICS 445) provides 2.5% of the jobs; and,
- → General Merchandise Stores (NAICS 452) provides 2.4% of the jobs.

^{*} LQ (Location Quotient) represents the concentration — the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

The ten sub-sectors with the highest concentration¹, or greatest competitive advantage, (and representing at least 0.05% of the region's jobs in 2005) were:

- → Forestry & Logging (NAICS 113) with a concentration of 16.1;
- ♦ Wood Product Manufacturing (NAICS 321), with a concentration of 6.7;
- Crop Production (NAICS 111), with a concentration of 2.4;
- → Gasoline Stations (NAICS 447) with a concentration of 2.1;
- → Truck Transportation (NAICS 484) with a concentration of 2.1;
- → Animal Production (NAICS 112) with a concentration of 2.0;
- → Nursing & Residential Care Facilities (NAICS 623), with a concentration of 2.0;
- → Warehousing & Storage (NAICS 493) with a concentration of 2.0;
- → Nonmetallic Mineral Product Manufacturing (NAICS 327) with a concentration of 1.9; and,
- → Building Material & Garden Equipment & Supplies Dealers (NAICS 444) with a concentration of 1.7.

The top ten fastest growing sub-sectors from 2001 to 2005, and providing at least 0.05% of the region's jobs, were:

- ▼ Internet Service Providers, Web Search Portals & Data Processing Services (NAICS 518), with a 20.2% average annual growth rate (AAGR);
- → Wholesale Electronic Markets & Agents & Brokers (NAICS 425), with a 14.7% AAGR;
- → Waste Management & Remediation Services (NAICS 562), with a 12.4% AAGR;
- → Construction of Buildings (NAICS 236), with a 9.6% AAGR;
- Private Households (NAICS 814), with a 9.3% AAGR;
- → Furniture & Related Product Manufacturing (NAICS 337), with a 9.0% AAGR;
- → Furniture & Home Furnishings Stores (NAICS 442), with an 8.9% AAGR;
- → Nonmetallic Mineral Product Manufacturing (NAICS 327), with a 7.7% AAGR;
- → Specialty Trade Contractors (NAICS 238), with a 7.5% AAGR; and,
- → Nonstore Retailers (NAICS 454), with a 7.4% AAGR.

The top ten best-paying sub-sectors in 2005, and providing at least 0.05% of the region's jobs, were:

- → Pipeline Transportation (NAICS 486), with an average annual wage of \$123,272;
- → Utilities (NAICS 517), \$72,561;
- Securities, Commodity Contracts & Other Financial Investments and Related Activities (NAICS 523), \$70,240;
- → Telecommunications (NAICS 517), \$54,457;
- → Mining (except Oil & Gas) (NAICS 212), \$54,318;
- → Heavy & Civil Engineering Construction (NAICS 237), \$52,556;
- → Hospitals (NAICS 622), \$47,693;
- → Management of Companies & Enterprises (NAICS 551), \$47,194;
- Nonmetallic Mineral Product Manufacturing (NAICS 327), \$46,887; and,
- → Paper Manufacturing (NAICS 322), \$44,859.

¹ A concentration greater than 1.0 means the region has a higher concentration of jobs in that industry than is found statewide. Industries highly concentrated in a region are important to the region, even if they are not the largest in employment size.

Looking at the four-digit NAICS level, at private sector industry groups, **Figure 9** shows facts about the top 20 fastest growing industry groups, where the industry groups provided at least 0.01% of the region's employment. Some of these industry groups are very small in employment, but may warrant watching due to the very high growth reported from 2001-2005.

Figure 9 Top 20 Fastest Growing Industry Groups

| | | | | ∠uus Avg. |
|-------|--|--------|-----------|-----------|
| | | 2005 | 2001-2005 | Annual |
| NAICS | Industry Group | Empl.* | AAGR | Wage |
| 6117 | Educational Support Services | 10 | 59.7% | \$ 15,514 |
| 7131 | Amusement Parks & Arcades | S | 50.3% | \$ 7,849 |
| 5152 | Cable & Other Subscription Programming | 30 | 49.5% | \$ 63,888 |
| 5621 | Waste Collection | 270 | 49.3% | \$ 41,316 |
| 3259 | Other Chemical Product & Preparation Manufacturing | S | 47.0% | \$ 41,516 |
| 3321 | Forging & Stamping | S | 36.8% | \$ 37,756 |
| 5181 | Internet Service Providers & Web Search Portals | S | 36.2% | \$ 29,807 |
| 5172 | Wireless Telecommunications Carriers (except Satellite) | S | 35.8% | \$ 27,517 |
| 4541 | Electronic Shopping & Mail-Order Houses | 210 | 31.5% | \$ 32,409 |
| 1152 | Support Activities for Animal Production | 20 | 28.8% | \$ 13,522 |
| 4533 | Used Merchandise Stores | 210 | 27.3% | \$ 16,510 |
| 4885 | Freight Transportation Arrangement | S | 27.0% | \$ 35,400 |
| 7223 | Special Food Services | 290 | 25.9% | \$ 19,524 |
| 5416 | Management, Scientific & Technical Consulting Services | 790 | 24.0% | \$ 30,883 |
| 4862 | Pipeline Transportation of Natural Gas | S | 22.5% | \$168,077 |
| 3116 | Animal Slaughtering & Processing | 60 | 20.4% | \$ 28,732 |
| 4529 | Other General Merchandise Stores | 1,060 | 20.3% | \$ 23,874 |
| 7113 | Promoters of Performing Arts, Sports & Similar Events | S | 18.0% | \$ 24,267 |
| 6216 | Home Health Care Services | 1,070 | 16.4% | \$ 24,736 |
| | Household & Institutional Furniture & Kitchen Cabinet | | | |
| 3371 | Manufacturing | 390 | 16.0% | \$ 27,235 |
| | For the control of th | C. I | | |

2005 Ava

REGIONAL SNAPSHOT 2006 & 2007

This snapshot provides estimates of employment change since 2005, to see what effects recent events may be having on the economy, as well as any lingering effects of the 2001 recession. This analysis uses a different data source than that used for the main report, so the findings for each time period are reported separately.*

For the Northern Sacramento Valley Region, a look at recent preliminary data shows that the employment growth seen from 2001 to 2005 has continued in 2006 and 2007. Overall, nonfarm employment grew by 2.4% from 2005 to 2006, and again by 2.1% into 2007. From 2005 to 2006, only one sector reported losses (Other Services), and from 2006 to 2007, several reported losses, but not enough to negate overall growth.

Of particular interest, the Manufacturing sector's losses have slowed and almost stopped, with growth in 2006, but slight losses reported into 2007. The Professional & Business Services sector has experienced job growth since 2005, but Information sector employment has fluctuated. Growth in Construction continued in 2006, but this appears to be reversing in 2007, likely due to the housing downturn. Financial Activities also appears to be losing jobs most recently.

The following table summarizes employment change from 2001 to 2007. For 2001 through 2006, annual employment was compared; for 2006 to 2007, monthly employment data from July of each year was compared.

| NORTHERN SACRAMENTO VALLEY | 2001-2005 | 2005-2006 | July06-July07 |
|------------------------------------|-----------|-----------|---------------|
| Total Nonfarm | 2.0% | 2.4% | 2.1% |
| Natural Resources & Mining | -13.6% | 14.3% | 9.3% |
| Construction | 27.3% | 7.2% | -4.6% |
| Manufacturing | -10.2% | 1.9% | -0.1% |
| Trade, Transportation, & Utilities | 3.7% | 3.2% | 2.9% |
| Information | -4.1% | 0.0% | -4.3% |
| Financial Activities | 8.5% | 0.0% | -6.8% |
| Professional & Business Services | -2.3% | 2.4% | 3.4% |
| Educational & Health Services | 6.3% | 0.8% | 5.0% |
| Leisure & Hospitality | 6.4% | 5.0% | 2.7% |
| Other Services | -2.1% | -1.4% | -0.5% |
| Government | 3.3% | 2.6% | 4.0% |

^{*} The source for the 2006 and 2007 data is the Current Employment Statistics (CES) program. The source of the CES data differs from the primary source of data for this Economic Profile report, the Quarterly Census of Employment and Wage (QCEW) data, and information provided here may differ from the QCEW data released in the future for 2006 and 2007. Because the methodology behind the two data sources is different, the CES data is not commingled with the QCEW data in other sections of this report. This data was provided by the CES Unit at the LMID. The data used for the main report was summarized to match the definitions used in the CES data so that comparisons could be made regarding growth. For example, the CES data does not include the Private Households industry employment in the totals for the Other Services sector, as the Private Households industry only reports employment annually and data is not available for the CES monthly estimates.

THE ECONOMIC BASE

The economic base is traditionally considered to be made up of export-oriented industries in the study area - industries that sell a large portion of their goods or services to people and businesses in markets outside of the area. While the past economic base reports have varied in how they defined the economic base, we have decided to use the more traditional definition for this section of the report. Other industries that are also important to the region will be discussed in a later section.

The following sectors make up the economic base:

High Tech Manufacturing
Diversified Manufacturing
Wholesale Trade & Transportation
Professional, Business & Information Services
Tourism & Entertainment
Federal Government (Defense & Other Federal Government)
Resource Based

The Northern Sacramento Valley Region's economic base industries provided 33,800 jobs in 2005 (some employment was suppressed due to confidentiality within the High Tech Manufacturing, Professional, Business & Information Services and Tourism & Entertainment sectors), or about 19.2% of the region's jobs. From 2001 to 2005, the economic base industries reported overall job growth of 1%, up over 240 jobs.

The Resource Based sector is the largest component of the region's economic base, reporting 10,780 jobs in 2005; however, the sector reported job losses of almost 260 jobs from 2001 to 2005, down 2.3%.

The second largest component of the economic base is Professional, Business & Information Services, with almost 8,780 jobs in 2005, followed by Diversified Manufacturing with 4,800 jobs and Wholesale Trade & Transportation with over 4,590 jobs.

Each region's economic base is unique in that the distribution of employment differs from region to region. **Figure 10** shows the distribution of jobs in 2005 and **Figure 11** shows employment from 2001 to 2005 for the Northern Sacramento Valley Region's economic base.

Figure 10 Economic Base Employment 2005

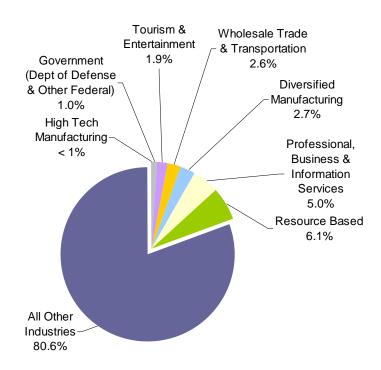
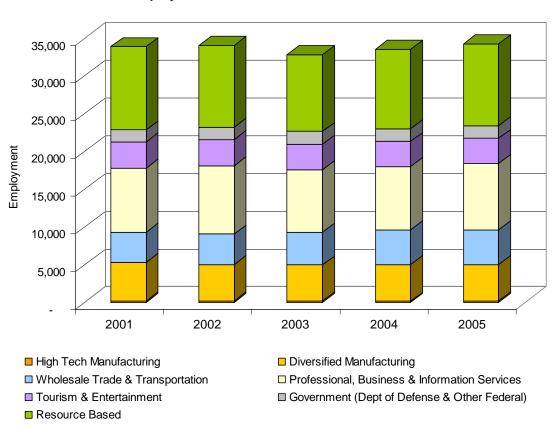


Figure 11 Economic Base Employment 2001-2005



In addition to employment size, job growth is another important factor. For the period 2001 to 2005, four of the seven sectors of the economic base reported job growth. Wholesale Trade & Transportation reported the fastest growth (highest percentage of job growth) for this period, up 14.3%. This was followed by Federal Government (Dept of Defense & Other Federal), up 9.6%, and Professional, Business & Information Services, up 2.1%.

Of the remaining four sectors, Diversified Manufacturing reported the greatest number and percentage of jobs lost from 2001 to 2005, down over 290 jobs or 5.8%. Resource Based experiences the second greatest number of jobs lost, down almost 260 jobs. High Tech Manufacturing reported the second greatest percentage of job losses, down 4.6%. (While the employment numbers for all but one sub-sector must be suppressed due to confidentiality, we can report the overall percentage of change.)

Of note, the non-confidential data for High Tech Manufacturing would show that this industry actually reported job growth of 18.2% from 2001 to 2005; however this is misleading because only one sub-sector has reportable employment numbers.

Figure 12 shows job growth for each component of the economic base, from 2001 to 2005.

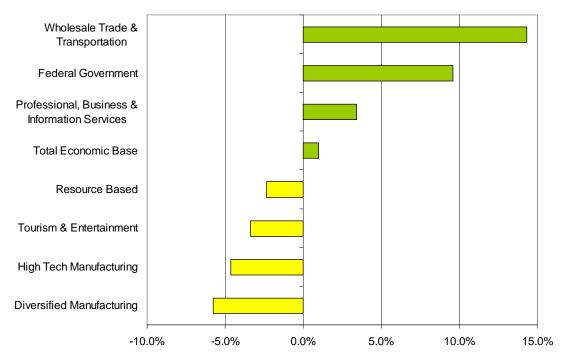


Figure 12 Job Growth 2001 - 2005

Size of Business

From 2001 to 2005, the percentage of economic base businesses with fewer than 100 employees remained constant at 98.5% in both 2001 and 2005. These businesses provided 70.6% of the economic base employment in 2001, and 72.1% of the base employment in 2005. In contrast, only 1.5% of the private sector businesses in the economic base employ 100 or more workers in 2005, and these businesses provide 27.9% of the economic base's private sector jobs.

Figure 13 Distribution of Firms and Jobs in the Economic Base by Size of Business in 2005

| Size Category (# employees) | % of Firms | % of Employment |
|--------------------------------|------------|-----------------|
| 0-4 | 58.5% | 8.1% |
| 5-9 | 16.3% | 9.3% |
| 10-19 | 12.4% | 14.6% |
| 20-49 | 8.2% | 20.7% |
| 50-99 | 3.2% | 19.3% |
| 100-249 | 1.1% | 13.1% |
| 250-499 | 0.4% | 12.1% |
| 500+ | 0.0% | 2.7% |

Businesses with fewer than 50 employees provided 52.7% of all (private) economic base jobs in 2005; in comparison, businesses with fewer than 50 employees provided 58.7% of all private industry jobs in the region. Looking at the smallest firms, those with fewer than 10 employees provided 17.4% of all (private) economic base jobs.

Both High Tech Manufacturing and Wholesale Trade & Transportation reported the highest percentage of businesses with fewer than 100 employees, at 100%; however, some size-of-firm data was suppressed due to confidentiality for a number of economic base industries, causing these two sectors and some industries to report 100% of the firms having fewer than 100 employees when the actual percentages may be lower. Diversified Manufacturing reported the lowest percentage of businesses with fewer than 100 employees, at 95.2%. The percentage of economic base firms that are businesses with fewer than 100 employees and fewer than 50 employees, by industry sector, is included in **Figure 14**.

Figure 14 provides a summary of facts for the economic base industries (some employment is suppressed at the sub-sector level, due to confidentiality):

Figure 14 Economic Base

| Sector | 2005 Empl* | Growth 01-05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with less than 100 empl*** | Firms with less than 50 empl*** |
|---|---------------|-----------------|--------------|------------------------------|----------------------------------|---------------------------------------|
| High Tech Manufacturing**** | 10 | -4.6%**** | 0.05 | \$ 36,574 | 100.0% | 85.7% |
| Diversified Manufacturing | 4,800 | -5.8% | 1.0 | \$ 39,734 | 95.2% | 89.7% |
| Wholesale Trade & Transportation | 4,590 | 14.3% | 0.6 | \$ 37,738 | 100.0% | 97.5% |
| Professional, Business & Information Svcs | 8,570 | 2.1% | 0.5 | \$ 33,965 | 98.2% | 95.9% |
| Tourism & Entertainment | 3,340 | -3.3% | 0.6 | \$ 13,276 | 99.2% | 93.6% |
| Government, Defense & Other Fed. Govt. | 1,710 | 9.6% | 0.6 | \$ 49,643 | Not Available | Not Available |
| Resource Based | 10,780 | -2.3% | 2.0 | \$ 29,183 | 98.7% | 96.2% |
| Total Economic Base***** | 33,810 | 1% | 0.7 | \$ 31,657 | 98.5% | 95.3% |

^{*} Employment rounded to nearest 10. Total employment may not equal sum of sectors due to rounding.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size of firm data was suppressed due to confidentiality, affecting the percentages reported.

^{****} High Tech Manufacturing non-confidential data shows that this industry reported job growth of just over 18% from 2001 to 2005; however this is misleading because only one sub-sector has reportable employment numbers. The sector actually experienced job losses of 4.6%.

***** The average annual wage for the total economic base was calculated using only private industry wage and employment information.

The Base Multiplier

One method for estimating the impact of the basic sector upon the local economy is the Base Multiplier. The Base Multiplier can provide insight as to how many non-basic jobs (jobs created in those industries not considered a part of the economic base) are created by one economic base job. The base multiplier is calculated by dividing the total employment by the economic base employment for a given year.

The Base Multiplier factor for the Northern Sacramento Valley Region for 2001 through 2005 was:

| Figure 15 Base Multiplier 2001 - 2005 | | | | | | | | | |
|---------------------------------------|------|------|------|------|------|--|--|--|--|
| Year | 2001 | 2002 | 2003 | 2004 | 2005 | | | | |
| Base Multiplier | 5.00 | 5.10 | 5.28 | 5.18 | 5.14 | | | | |

This suggests that about five jobs were created in non-basic industries for every economic base job created in 2001. This increased only slightly (to 5.14) jobs in 2005.

The following provides a more in-depth look at each component of the economic base.

HIGH TECH MANUFACTURING

The High Tech Manufacturing component of the economic base includes Computer & Peripheral Equipment Manufacturing; Communications Equipment Manufacturing; Semiconductor & Other Electronic Component Manufacturing; Navigational, Measuring, Electromedical and Control Instruments Manufacturing; Aerospace Product & Parts Manufacturing; and, Pharmaceutical & Medicine Manufacturing. In 2005, this sector was the smallest component of the region's economic base. Employment numbers are suppressed for all but one of the sub-sectors, making the reportable employment of 13 jobs very small and somewhat misleading; however, the sector is still the smallest in the economic base when all employment is taken into consideration.

Overall, the sector experienced job losses of 4.6%. Aerospace Product & Parts Manufacturing reported 200% job growth, but this could be misleading as the industry is extremely small (employment numbers are suppressed due to confidentiality). Next, Semiconductor & Other Electronic Component Manufacturing reported job growth of 18.2%, and Navigational, Measuring, Electromedical & Control Instruments Manufacturing reported job growth of 13.8% (employment numbers are suppressed for both of these industry groups due to confidentiality).

Job losses in High Tech Manufacturing were led by losses in Communications Equipment Manufacturing, down 27.3%, followed by Computer & Peripheral Equipment Manufacturing, down 17.6%.

Within High Tech Manufacturing, most of the jobs are found in Navigational, Measuring, Electromedical & Control Instruments Manufacturing, followed by Communications Equipment Manufacturing.

The region has a much lower concentration of jobs in High Tech Manufacturing (0.05 LQ) than found at the statewide level. All industry groups have a low concentration. **Figure 18** provides the concentration for all High Tech Manufacturing industries.

In 2005, the average annual wage for this sector was \$36,574, which is higher than the overall average annual wage of \$27,762 for all private industries in the region. At the industry group level, average annual wages ranged from a high of \$41,377 reported by Navigational, Measuring, Electromedical & Control Instruments Manufacturing, to a low of \$30,368 reported by Computer & Peripheral Equipment Manufacturing.

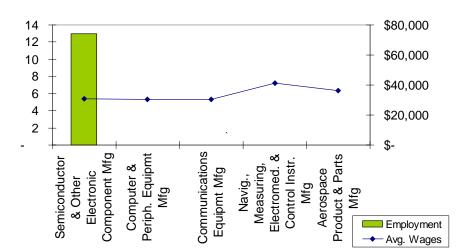


Figure 16 High Tech Manufacturing 2005 Employment & Average Wages

Figure 17 shows employment change from 2001 to 2005 for the industries in High Tech Manufacturing. Due to most industry groups' employment data being suppressed due to confidentiality, they are represented as a group, "Rest of High Tech Manufacturing."

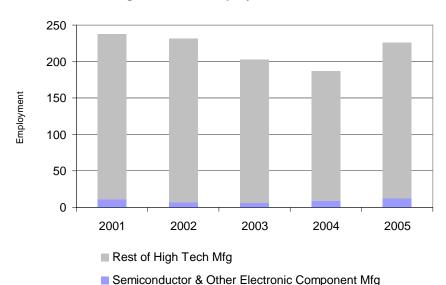


Figure 17 High Tech Manufacturing Industries Employment 2001-2005

Figure 18 provides a summary of economic facts for the High Tech Manufacturing sector.

Figure 18 High Tech Manufacturing

| NAIC S | Industry | 2005 Empl* | Growth 01- 05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl*** | Firms with < 50 empl*** |
|-----------|--|---------------|------------------|--------------|------------------------------|--------------------------------|-------------------------|
| 3341 | Computer & Peripheral Equipmt Mfg | S | -17.6% | S | \$ 30,368 | S | S |
| 3342 | Communications Equipment Mfg Semiconductor & Other Electronic | S | -27.3% | S | \$ 30,595 | S | S |
| 3344 | Component Mfg Navigational, Measuring, Electromed., | 10 | 18.2% | 0.01 | \$ 30,626 | 100.0% | 100.0% |
| 3345 | & Control Instruments Mfg Aerospace Product & Parts | S | 13.8% | S | \$ 41,377 | S | S |
| 3364 | Manufacturing | S | 200.0% | S | \$ 36,252 | S | S |
| 3254 | Pharmaceutical & Medicine Mfg | 0 | N/A | N/A | N/A | N/A | N/A |

^{*} Employment was rounded to nearest 10. "S" means employment was suppressed due to confidentiality.

DIVERSIFIED MANUFACTURING

The Diversified Manufacturing component of the economic base includes Wood Product Manufacturing, Paper Manufacturing, Printing & Related Support Activities, Furniture & Related Product Manufacturing, Medical Equipment & Supplies Manufacturing, Apparel Manufacturing, Chemical Manufacturing (except Pharma), and Plastics & Rubber Products Manufacturing. In 2005, this sector provided 4,800 jobs, and was the third largest component of the region's economic base.

Overall, Diversified Manufacturing reported job losses of 5.8% from 2001 to 2005, led by losses in Paper Manufacturing, down over 500 jobs or 71.3%. In addition to the losses in Paper Manufacturing, Printing & Related Support Activities reported the loss of over 40 jobs (-13.9%), and Medical Equipment & Supplies Manufacturing lost 10 jobs (-4.1%). Still, five of the eight subsectors reported job growth during this period. Furniture & Related Product Manufacturing reported the greatest number of jobs gained, up almost 140 jobs or 41.4%. The greatest percentage of job growth was experienced by the smallest industry group, Apparel Manufacturing, up 55.6%, with an increase of 10 jobs.

Within Diversified Manufacturing, by far the sub-sector providing the most jobs is Wood Product Manufacturing, with 3,000 jobs in 2005, followed by Furniture & Related Product Manufacturing (470 jobs) and Plastics & Rubber Products Manufacturing (320 jobs).

The region's concentration of Diversified Manufacturing jobs is equal to that found at the statewide level. The region has a very high concentration in one sub-sector, Wood Product Manufacturing (6.7 LQ), while the rest of the sub-sectors have lower concentrations than found at the statewide level.

In 2005, the average annual wage for this sector was \$39,734, higher than the overall average wage of \$27,762 for all private industries in the region. At the sub-sector level, this ranged from a high of \$44,859 in Paper Manufacturing, to a low of \$19,463 in Apparel Manufacturing. The 2005 average annual wage and employment are shown in **Figure 19**.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size of firm data may have been suppressed due to confidentiality. "S" means all such data was suppressed.

Figure 19 Diversified Manufacturing 2005 Employment & Average Wages

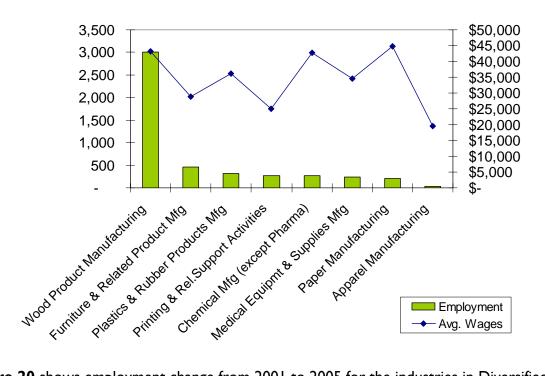


Figure 20 shows employment change from 2001 to 2005 for the industries in Diversified Manufacturing.

Figure 20 Diversified Manufacturing Industries Employment 2001-2005

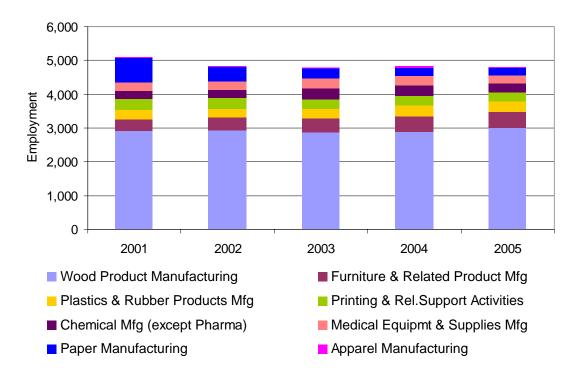


Figure 21 provides a summary of economic facts for the Diversified Manufacturing sector.

Figure 21 Diversified Manufacturing

| NAICS | Sub-sector | 2005 Emplymt* | Growth 01- 05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl*** | Firms with < 50 empl*** |
|----------|---------------------------------|------------------|------------------|--------------|------------------------------|--------------------------------|-------------------------------|
| 321 | Wood Product Manufacturing | 3,000 | 2.8% | 6.7 | \$ 43,133 | 79.5% | 56.4% |
| 322 | Paper Manufacturing | 210 | -71.3% | 0.6 | \$ 44,859 | S | S |
| 323 | Printing & Support Activities | 270 | -13.9% | 0.4 | \$ 25,002 | 100.0 | 100.0% |
| 337 | Furniture & Related Product Mfg | 470 | 41.4% | 0.7 | \$ 28,780 | 100.0 | 100.0% |
| 3391 | Medical Equipmt & Supplies Mfg | 240 | -4.1% | 0.4 | \$ 34,528 | 100.0 | 100.0% |
| 315 | Apparel Manufacturing | 30 | 55.6% | 0.0 | \$ 19,463 | 100.0 | 100.0% |
| 325-3254 | Chemical Mfg (except Pharma) | 270 | 9.4% | 0.6 | \$ 42,666 | 100.0 | 100.0% |
| 326 | Plastics & Rubber Products Mfg | 320 | 9.1% | 0.5 | \$ 36,246 | 100.0 | 100.0% |
| Ma | | | | | | | |

^{*} Employment rounded to nearest 10. "S" means employment was suppressed due to confidentiality.

WHOLESALE TRADE & TRANSPORTATION

The Wholesale Trade & Transportation sector includes Merchant Wholesalers, Durable Goods; Merchant Wholesalers, Nondurable Goods; Wholesale Electronic Markets & Agents & Brokers; and, Air Transportation. In 2005, Wholesale Trade & Transportation was the fourth largest component of the region's economic base, providing over 4,590 jobs.

Overall, Wholesale Trade & Transportation reported job growth of 14.3% from 2001 to 2005. Three of the four sub-sectors reported growth. Merchant Wholesalers, Durable Goods reported the greatest number of jobs gained, up almost 420 jobs (19.2%). Wholesale Electronic Markets & Agents & Brokers reported the greatest percentage of job growth, up 73.4% (a gain of almost 160 jobs). Only Air Transportation reported job losses during this period, down 70 jobs or 33.8%.

Within Wholesale Trade & Transportation, most of the jobs are found in Merchant Wholesalers, Durable Goods and Merchant Wholesalers, Nondurable Goods. Looking further, Merchant Wholesalers, Durable Goods employment is led by Industrial Machinery & Equipment Merchant Wholesalers and Brick, Stone & Related Construction Material Merchant Wholesalers. Merchant Wholesalers, Nondurable Goods employment is led by Grain & Field Bean Merchant Wholesalers, Beer & Ale Merchant Wholesalers, and Farm Supplies Merchant Wholesalers.

The region has a lower concentration of jobs in Wholesale Trade & Transportation (0.6 LQ) than at the statewide level. This is also true for all four sub-sectors. At a much more detailed level (5-digit level) and across all sub-sectors, high concentrations are found in a number of industries, led by Grain & Field Bean Merchant Wholesalers (31.1 LQ); Livestock Merchant Wholesalers (14.9 LQ); Motor Vehicle Parts (Used) Merchant Wholesalers (5.8 LQ); and, Other Farm Product Raw Material Merchant Wholesalers (5.8 LQ).

In 2005, the average annual wage for this sector was \$37,738, higher than the overall average wage of \$27,762 for all private industries in the region. At the sub-sector level, this ranged

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size of firm data was suppressed due to confidentiality. "S" means all such data was suppressed.

from a high of \$39,060 in Merchant Wholesalers, Durable Goods, to a low of \$31,057 in Air Transportation. **Figure 22** shows employment and average annual wages for all of the subsectors.

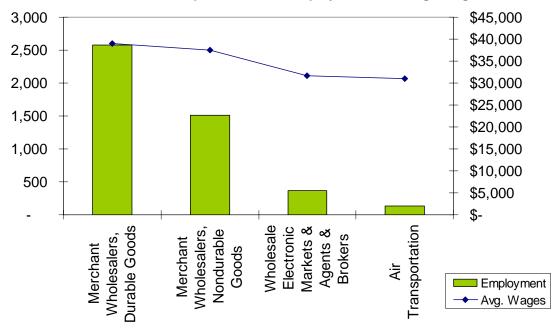
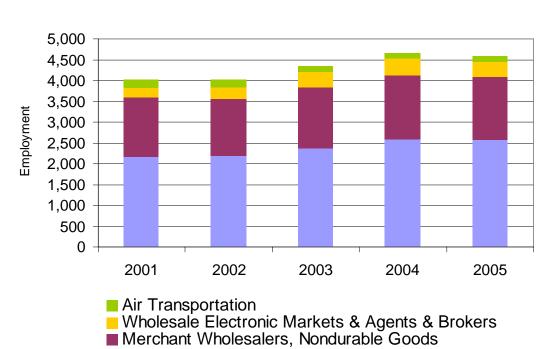


Figure 22 Wholesale Trade & Transportation 2005 Employment & Average Wages

Figure 23 shows employment change from 2001 to 2005 for the industries in Wholesale Trade & Transportation.



Merchant Wholesalers, Durable Goods

Figure 23 Wholesale Trade & Transportation Industries Employment 2001-2005

Figure 24 provides a summary of economic facts for the Wholesale Trade & Transportation sector.

Figure 24 Wholesale Trade & Transportation

| NAICS | Sub-sector | 2005 Emplymt* | Growth 01- 05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl*** | Firms with < 50 empl*** |
|-------|--------------------------------------|------------------|------------------|--------------|------------------------------|--------------------------------|-------------------------|
| 423 | Merchant Whisirs, Durable Goods | 2,580 | 19.2% | 0.7 | \$ 39,060 | 100.0% | 97.4% |
| 424 | Merchant Whisirs, Nondurable Goods | 1,510 | 5.1% | 0.5 | \$ 37,558 | 100.0% | 96.2% |
| 425 | Whisle Electr. Mkts, Agents, Brokers | 370 | 73.4% | 0.4 | \$ 31,739 | 100.0% | 100.0% |
| 481 | Air Transportation | 140 | -33.8% | 0.2 | \$ 31,057 | 100.0% | 100.0% |

^{*} Employment rounded to nearest 10.

PROFESSIONAL, BUSINESS & INFORMATION SERVICES

The Professional, Business & Information Services sector includes Legal Services; Accounting, Tax Preparation, Bookkeeping and Payroll Services; Architectural, Engineering and Related Services; Computer Systems Design and Related Services; Management, Scientific and Technical Consulting Services; Scientific Research and Development Services; Management of Companies and Enterprises; Employment Services; Software Publishers; Internet Service Providers and Web Search Portals; and, Data Processing, Hosting and Related Services. In 2005, this sector was the second largest component of the economic base, and provided almost 8,570 jobs.

Overall, this sector reported job growth of 3.4% from 2001 to 2005. Seven of the eleven subsectors reported job gains during this period. Management, Scientific & Technical Consulting Services s reported the greatest number of jobs gained, up almost 460 jobs, and Internet Service Providers & Web Search Portals reported the fastest growth (greatest percentage increase), up 244%.

Job losses were led by Employment Services, down 850 jobs. Software Publishers reported the greatest percentage of jobs lost, down 81.8%.

Within Professional, Business & Information Services, most of the jobs are found in Employment Services, followed by Accounting, Tax Preparation, Bookkeeping & Payroll Services, Management of Companies & Enterprises and Legal Services.

The region has a lower concentration of jobs in Professional, Business & Information Services (0.5 LQ) than found at the statewide level. All of the sub-sectors also have concentration lower than found statewide.

In 2005, the average annual wage for the sector was \$33,965. Architectural, Engineering & Related Services reported the highest average wage of \$55,094, while Employment Services reported the lowest average wage of \$16,839. **Figure 25** shows employment and average annual wages for all of the sub-sectors.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size of firm data was suppressed due to confidentiality. "S" means all such data was suppressed.

Figure 25 Professional, Business & Information Services 2005 Employment & Wages 3,000

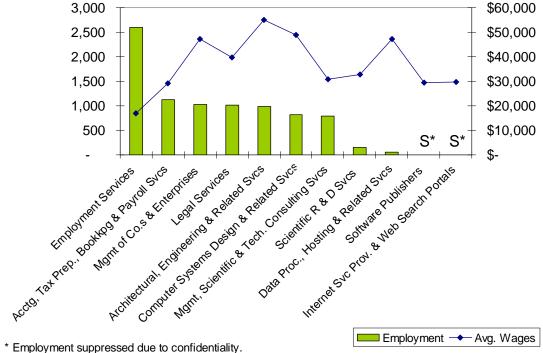


Figure 26 shows employment change from 2001 to 2005 for the industries in Professional, **Business & Information Services.**



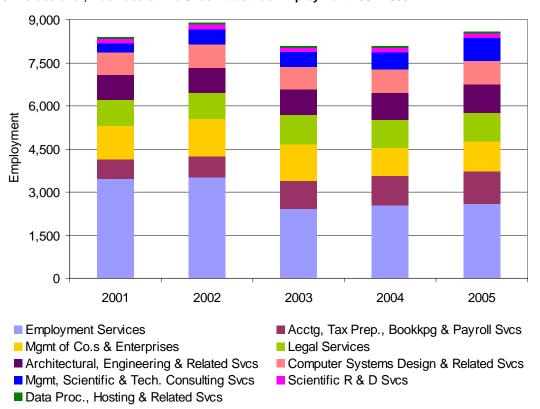


Figure 27 provides a summary of economic facts for the Professional, Business & Information Services sector.

Figure 27 Professional, Business & Information Services

| | | 2005 | Growth | 2005 | 2005 Avg. Annual | Firms with < 100 | Firms with < 50 |
|-------|---|----------|--------|------|---------------------|------------------|-----------------|
| NAICS | Industry | Emplymt* | 01- 05 | LQ** | Wages | empl*** | empl*** |
| 5411 | Legal Services | 1,010 | 13.4% | 0.6 | \$ 39,847 | 100.0% | 100.0% |
| 5412 | Acctg, Tax Prep, Bookkpg & Payroll Svcs | 1,120 | 60.5% | 0.9 | \$ 29,143 | 100.0% | 98.4% |
| 5413 | Architectural & Engineering Svcs | 990 | 13.1% | 0.5 | \$ 55,094 | 100.0% | 100.0% |
| 5415 | Computer Systems Design Svcs | 820 | 8.0% | 0.4 | \$ 48,981 | 95.7% | 95.7% |
| 5416 | Mgmt, Scientific & Tech.Consult.Svcs | 790 | 136.1% | 0.5 | \$ 30,883 | 100.0% | 97.6% |
| 5417 | Scientific R & D Svcs | 160 | 6.8% | 0.1 | \$ 32,706 | 100.0% | 100.0% |
| 5511 | Mgmt of Co.s & Enterprises | 1,030 | -12.8% | 0.4 | \$ 47,194 | 100.0% | 93.1% |
| 5613 | Employment Svcs | 2,600 | -24.6% | 0.5 | \$ 16,839 | 75.8% | 45.5% |
| 5112 | Software Publishers | S | -81.8% | S | \$ 29,538 | S | S |
| 5181 | Internet Prov. & Web Search Portals | S | 244.1% | S | \$ 29,807 | 100.0% | 100.0% |
| 5182 | Data Processing & Hosting Svcs | 50 | -17.2% | 0.2 | \$ 47,266 | S | S |

^{*} Employment rounded to nearest 10. "S" means the data was suppressed due to confidentiality.

TOURISM & ENTERTAINMENT

The Tourism & Entertainment sector includes Motion Picture & Video Industries; Sound Recording Industries; Amusement, Gambling & Recreation Industries; and, Accommodation. In 2005, this sector provided 3,340 jobs, and was the fifth largest component of the region's economic base.

Overall, this sector reported job losses of 3.4% from 2001 to 2005, down over 110 jobs. Only the Amusement, Gambling & Recreation Industries sub-sector reported job growth, and this was only an increase of one job (0.1%). Accommodation reported the greatest number of jobs lost, down almost 110 jobs, while Motion Picture & Video Industries reported the greatest percentage of job losses, down 60%.

Within Tourism & Entertainment, most of the jobs are found in Amusement, Gambling & Recreation Industries, followed by Accommodation. Looking further, Amusement, Gambling & Recreation Industries employment is led by Fitness & Recreational Sports Centers. Accommodation employment is led by Hotels (except Casino Hotels) & Motels.

The region has a lower concentration of Tourism & Entertainment jobs (0.6 LQ) than found at the statewide level. This is also true for all sub-sectors. At the most detailed industry level (6-digit NAICS code), high concentrations are found several industries, led by Marinas (6.0 LQ), Other Gambling Industries (2.9 LQ), Rooming & Boarding Houses (2.0 LQ), All Other Traveler Accommodation (1.9 LQ), and Bowling Centers (1.8 LQ).

In 2005, the average annual wage reported for this sector was \$13,276, significantly lower than the region's average wage for all private industries of \$27,762. This ranged from a high of

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size of firm data was suppressed due to confidentiality. "S" means all such data was suppressed.

\$18,705 for Sound Recording Industries, to a low of \$11,241 for Motion Picture & Video Industries. **Figure 28** shows employment and average annual wages for all of the sub-sectors.

Figure 28 Tourism & Entertainment 2005 Employment & Wages

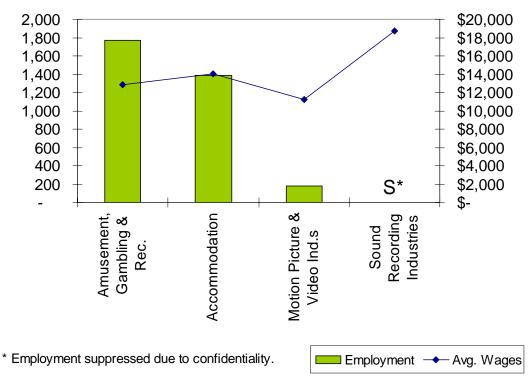


Figure 29 shows employment change from 2001 to 2005 for the industries in Tourism & Entertainment. Sound Recording Industries is not shown due to confidentiality.

Figure 29 Tourism & Entertainment Industries Employment 2001-2005

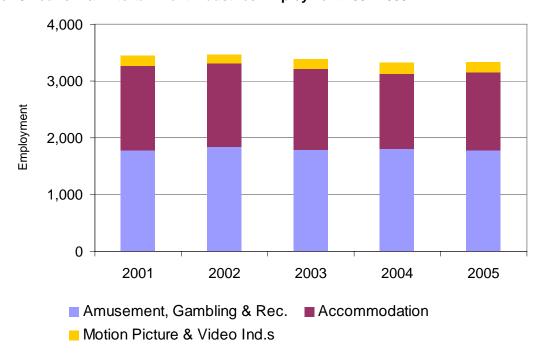


Figure 30 provides a summary of economic facts for the Tourism & Entertainment sector.

Figure 30 Tourism & Entertainment

| NAICS | Sub-sector/Industry | 2005 Empl* | Growth 01- 05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl*** | Firms with < 50 empl*** |
|-------|-----------------------------------|---------------|------------------|--------------|------------------------------|--------------------------------|-------------------------------|
| 5121 | Motion Picture & Video Industries | 180 | -3.2% | 0.1 | \$ 11,241 | 100.0% | 100.0% |
| 5122 | Sound Recording Industries | S | -60.0% | S | \$ 18,705 | S | S |
| 713 | Amusement, Gambling & Recreation | 1,770 | 0.1% | 0.9 | \$ 12,865 | 100.0% | 92.6% |
| 721 | Accommodation | 1,390 | -7.3% | 0.6 | \$ 14,056 | 100.0% | 95.3% |

^{*} Employment rounded to nearest 10. "S" means the data was suppressed due to confidentiality.

RESOURCE BASED

The Resource Based industries include Farm², Logging, Mining, Sawmill & Woodworking Machinery Manufacturing, Fruit & Vegetable Preserving & Specialty Food Manufacturing, Animal Slaughtering & Processing and Seafood Preparation & Packaging³. Resource Based is the largest component of the region's economic base.

In 2005, this sector provided 10,780 jobs for the region, although the sector reported job losses of almost 260 jobs from 2001 to 2005, down 2.3%. Only two of the seven of the subsectors in the Resource Based sector reported job growth during this period; Fruit & Vegetable Preserving & Specialty Food Manufacturing reported job growth of over 50 jobs, or 4%. Animal Slaughtering & Processing reported the fastest growth, up 110%, representing an increase of over 30 jobs.

Job losses were led by the Farm sector, down 210 jobs from 2001 to 2005 (-2.4%). The greatest percentage of jobs lost was reported by Seafood Product Preparation & Packaging, down 100%.

There is higher concentration of Resource Based jobs in this region (2.0 LQ) than found at the statewide level. Within the Resource Based sector, four sub-sectors/industries have higher concentrations than at the statewide level. Sawmill & Woodworking Machinery Manufacturing has a very high concentration (27.6 LQ), followed by Logging (19.8 LQ), Fruit & Vegetable Preserving & Specialty Food Manufacturing (3.4 LQ), and Farm (1.9 LQ). See **Figure 33** for the concentration levels for all sub-sectors.

In 2005, the average annual wage reported for this sector was \$29,183, somewhat higher than the region's average wage for all private industries of \$27,762. This ranged from a high of \$53,528 for Mining, to a low of \$24,498 for Farm jobs.

Figure 31 shows employment and average annual wages for the Resource Based industries.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size of firm data was suppressed due to confidentiality. "S" means all such data was suppressed.

² Farm equals all Agriculture, Forestry, Fishing & Hunting jobs (NAICS 11) except Logging (NAICS 1133).

³ There was no employment reported for Sawmill & Woodworking Machinery Manufacturing or for Seafood Preparation & Packaging for the Greater Sacramento Region. These industries are mentioned here so that the economic base definition is consistent across regions.

Figure 31 Resource Based 2005 Employment & Wages

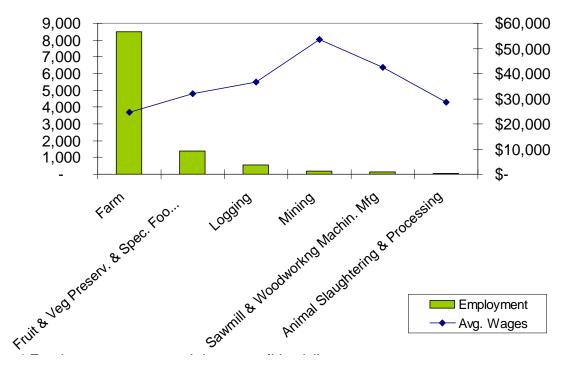


Figure 32 shows employment change from 2001 to 2005 for the Resource Based industries.

Figure 32 Resource Based Industries Employment 2001-2005

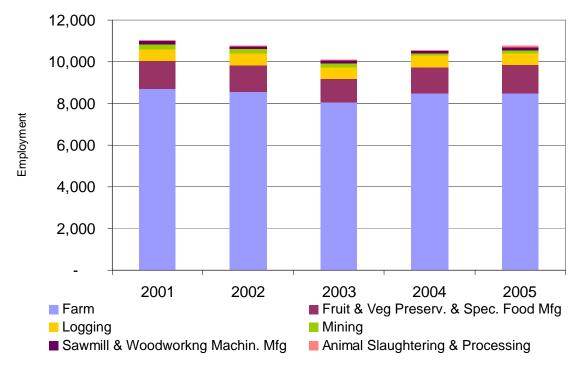


Figure 33 provides a summary of economic facts for the Resource Based industries.

Figure 33 Resource Based

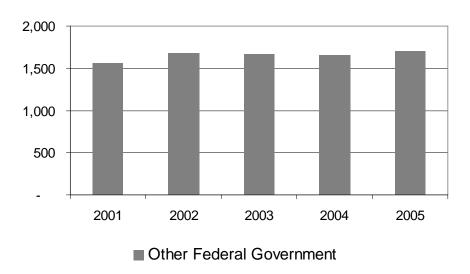
| NAICS | Sub-sector/Industry | 2005 Empl* | Growth 01- 05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl*** | Firms with < 50 empl*** |
|---------|-----------------------------------|---------------|------------------|--------------|------------------------------|--------------------------|-------------------------|
| 11-1133 | Farm | 8,500 | -2.4% | 1.9 | \$ 24,498 | 99.1% | 96.8% |
| 1133 | Logging | 530 | -4.5% | 19.8 | \$ 36,743 | 100.0% | 100.0% |
| 21 | Mining | 170 | -33.9% | 0.7 | \$ 53,528 | 100.0% | 100.0% |
| 33321 | Sawmill & Woodwrkng Machinery Mfg | 150 | -10.8% | 27.6 | \$ 42,406 | Not Available | Not Available |
| | Fruit & Vegetable Preserving & | | | | | | |
| 3114 | Specialty Food Mfg | 1,370 | 4.0% | 3.4 | \$ 31,904 | 66.7% | 66.7% |
| 3116 | Animal Slaughtering & Processing | 60 | 110.0% | 0.3 | \$ 28,732 | S | S |
| 3117 | Seafood Product Prep. & Pckgng | 0 | -100.0% | N/A | N/A | N/A | N/A |

^{*} Employment rounded to nearest 10. "S" means employment was suppressed due to confidentiality.

FEDERAL GOVERNMENT, DEFENSE AND OTHER FEDERAL GOVERNMENT

The Federal Government sector in the economic base includes Defense and Other Federal Government. There is no data available for Defense jobs. In 2005, Other Federal Government provided 1,710 of the region's jobs. This sector experienced growth of 150 jobs from 2001 to 2005, up 9.6%.

Figure 34 Defense and Other Federal Government Employment 2001 to 2005



The region has a lower concentration (0.6 LQ) of Other Federal Government jobs than found at the statewide level.

In 2005, the regional average annual wage for all federal jobs was \$49,643. A separate average for Defense or Other Federal Government was not available, so we are presenting the average for all federal jobs.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size of firm data was suppressed due to confidentiality. "S" means all such data was suppressed.

Figure 35 provides a summary of economic facts for Federal Government, Defense and Other Federal Government.

Figure 35 Federal Government, Defense and Other Federal Government

| Sub-sector | 2005 Employmt* | Growth 01- 05 | 2005 LQ** | 2005 Avg. Annual Wages*** |
|--------------------------|-------------------|------------------|--------------|---------------------------------|
| Defense | N/A | N/A | N/A | N/A |
| Other Federal Government | 1,710 | 9.6% | 0.6 | \$ 49,643 |

 $[\]ensuremath{^*}$ Employment rounded to nearest 10.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} A separate average for Defense or Other Federal Government was not available, so we are presenting the average for all federal jobs.

BEYOND THE ECONOMIC BASE: A LOOK AT INDUSTRY CLUSTERS AND OTHER INDUSTRIES IMPORTANT TO THE REGION'S ECONOMY

This section looks at industry clusters and sectors that are important to the region's economy, but are not considered a part of the economic base. Their inclusion here reflects the broader interpretation of the economic base seen in some of the past economic base reports. For the Northern Sacramento Valley Region, this will include the Food Chain cluster, Construction, Manufacturing Value Chain, Health Sciences & Services and All Government.

THE FOOD CHAIN

California is a leader in the global Food Chain. Global market forces are transforming California's Food Chain, as local firms become multinational firms and foreign firms produce locally in order to efficiently tailor products for local markets. As globalization has increased competition, it has also brought new opportunities in the form of new products for the state's consumers and new markets for the state's firms. Technology's role has been central as an enabler and driver in these global processes through advances in production, packaging, shipping and communications. Locally, California companies are adopting innovative new processes in order to meet consumers' changing demands, such as the increasing demand for high quality convenience foods and organic products, while remaining competitive.

The Food Chain⁶ cluster is composed of four components; Production, Support, Processing and Distribution. This cluster provides 7.6% of all jobs in the Northern Sacramento Valley Region, or about 13,170 jobs in 2005. From 2001 to 2005, the Food Chain cluster reported job growth of 1.3%. (Some employment was suppressed due to confidentiality.) Three of the four components reported job growth during this period.

Most of the jobs within this region's Food Chain cluster are in Production industries, providing 37% of the cluster's jobs, followed by Support with 30%. Processing provides 20% and Distribution 13% of the cluster's jobs.

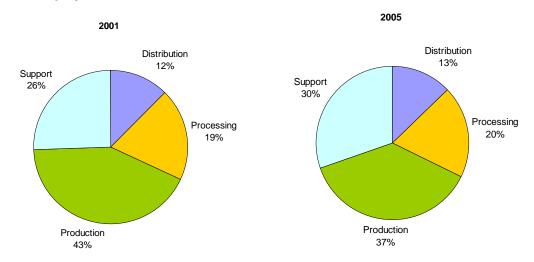
The distribution of jobs within the Food Chain cluster changed in all four areas from 2001 to 2005, with the greatest changes in Production and Processing, as seen in **Figure 36**.

⁴ The economic base reports released in 2006 used a broader definition of the economic base than the traditional one, as did the reports released in 2004 for the rural regions.

⁵ Excerpts from the report, *California's Food Chain at Work*, prepared for the California Economic Strategy Panel by Collaborative Economics, Inc.

⁶ This cluster includes some of the industries presented in the Resource Based component of the economic base.

Figure 36 Employment Distribution 2001 & 2005



From 2001-2005, three of the four cluster components reported job growth. Support experienced the greatest number and percentage of jobs gained during this period, up 630 jobs or 19.3%; Processing added 120 jobs, up 2.3%; and, Distribution added 60 jobs, up 3.6%. Only Production reported job losses, down almost 660 jobs, or 10.8%.

There is higher concentration of Food Chain jobs in this region (1.5 LQ) than found at the statewide level. Production reported the highest concentration (2.5 LQ) of the four Food Chain components, followed by Support (1.5 LQ) and Processing (1.1 LQ). Distribution has an equal concentration (1.0 LQ) to that found at the statewide level.

In 2005, the average annual wage reported for this sector was \$27,150, slightly lower than the region's average wage for all private industries of \$27,762.

Size of Business

From 2001 to 2005, the percentage of Food Chain businesses with fewer than 100 employees changed only slightly, from 98.7% in 2001 to 98.8% in 2005. These businesses provided 72.2% of the Food Chain employment in 2001, and 71.0% in 2005. In contrast, only 1.2% of the businesses in the Food Chain employ 100 or more workers, and these businesses provide 29% of the Food Chain jobs.

Figure 37 Distribution of Firms and Jobs in the Food Chain by Size of Business in 2005

| Size Category (# employees) | % of Firms | % of Employment |
|--------------------------------|------------|--------------------|
| 0-4 | 62.0% | 8.2% |
| 5-9 | 14.9% | 9.0% |
| 10-19 | 10.1% | 12.3% |
| 20-49 | 8.8% | 22.9% |
| 50-99 | 3.0% | 18.6% |
| 100-249 | 0.8% | 9.4% |
| 250-499 | 0.3% | 12.3% |
| 500+ | 0.1% | 7.3% |

Businesses with fewer than 50 employees provided 52.4% of all Food Chain jobs in 2005; in comparison, businesses with fewer than 50 employees provided 58.7% of all of the region's private industry jobs. Looking at the smallest firms, those with fewer than 10 employees provided 17.2% of all Food Chain jobs, compared to 21.3% of all private industry jobs.

Production reported the highest percentage of businesses with fewer than 100 employees, at 99.8%, while Processing reported the lowest percentage, at 89.8%. The percentage of Food Chain firms with fewer than 100 employees and fewer than 50 employees, by cluster component, is included in **Figure 38**.

Figure 38 provides a summary of facts for the Food Chain cluster components.

Figure 38 Food Chain

| Component | 2005 Empl* | Growth 01-05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl*** | Firms with < 50 empl*** |
|-------------------|---------------|-----------------|--------------|------------------------------|--------------------------------|-------------------------------|
| Production | 1,700 | 3.6% | 1.0 | \$ 33,652 | 99.8% | 98.7% |
| Support | 2,500 | 2.3% | 1.1 | \$ 32,749 | 96.2% | 86.2% |
| Processing | 4,950 | -10.8% | 2.5 | \$ 23,419 | 89.8% | 81.4% |
| Distribution | 4,020 | 19.3% | 1.5 | \$ 25,405 | 99.1% | 93.5% |
| Food Chain Totals | 13,170 | 1.3% | 1.5 | \$ 27,150 | 98.8% | 95.8% |

^{*} Employment rounded to nearest 10. Total employment may not equal the sum of the components' employment due to suppression of employment data for some industries.

Production

Production is the largest of the four Food Chain components, with 4,150 jobs in 2005. Within Production, the largest industry is Fruit & Tree Nut Farming with 2,400 jobs in 2005 (led by Tree Nut Farming with over 1,740 jobs), followed by Oilseed & Grain Farming with over 880 jobs (led by Rice Farming, with over 770 jobs).

Although Production as a whole reported job losses from 2001 to 2005 of over 600 jobs (down 10.8%), some industries within Production reported job gains. These include Food Crops Grown Under Cover, up 2700% (a very small industry, employment numbers are suppressed due to confidentiality); Cattle Ranching & Farming, up over 40 jobs (+10.1%); Other Animal Production, up over 20 jobs (+15,4%); and, Animal Aquaculture, up three jobs (+7.7%).

The job losses in Production were led by Fruit & Tree Nut Farming, down almost 340 jobs (-12.3%), and All Other Miscellaneous Crop Farming, down almost 310 jobs (-29.1%).

Figure 39 graphs the employment change for the Production industries from 2001 to 2005. Employment for Food Crops Grown Under Cover, Sugar Beet Farming and Hunting & Fishing was suppressed due to confidentiality.

More information on each industry's size and growth are provided in **Figure 40**.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size-of-firm data was suppressed due to confidentiality.

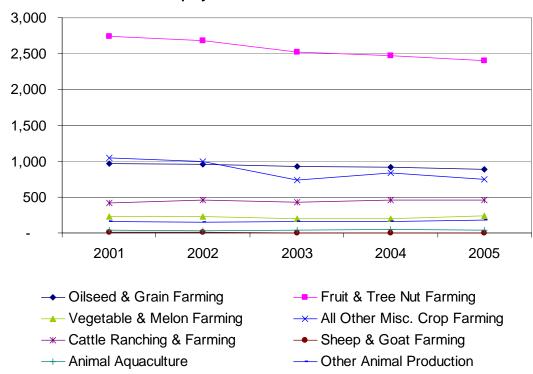


Figure 39 Production Industries Employment Growth 2001-2005

The Northern Sacramento Valley Region has a higher concentration of Production jobs (2.5 LQ) than found at the statewide level. Within Production, the industries with the highest concentrations include Oilseed & Grain Farming (30.2 LQ), Other Animal Production (7.7 LQ), Animal Aquaculture (6.7 LQ), All Other Miscellaneous Crop Farming (4.6 LQ), and Fruit & Tree Nut Farming (2.4 LQ). The concentration for each Production industry is provided in **Figure 40**.

Overall, Production reported an average annual wage of \$23,419 in 2005, which is lower than the region's average annual wage for all private industries of \$27,762. Within Production, Animal Aquaculture reported the highest average wage, at \$27,594, while Sheep & Goat Farming reported the lowest, at \$13,643.

Figure 40 provides a summary of economic facts for the Food Chain Production industries. (Size-of-business data were not available for industries defined at the five or six-digit NAICS code level. Some size-of-firm data was suppressed due to confidentiality. This may cause some industries to report 100% of firms with less than 50 or 100 employees when this is not actually the case.)

Figure 40 Food Chain - Production

| NAICS | Production | 2005 Employmt* | Growth 01-05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl**** | Firms with < 50 empl**** |
|--------|--|-------------------|-----------------|--------------|------------------------------|---------------------------------|--------------------------------|
| 1111 | Oilseed & Grain Farming | 880 | -8.2% | 30.2 | \$ 25,394 | 100.0% | 100.0% |
| 1113 | Fruit & Tree Nut Farming | 2,400 | -12.3% | 2.4 | \$ 21,715 | 100.0% | 97.8% |
| 11141 | Food Crops Grown Under Cover | S | S | S | \$ 34,778 | Not Available | Not Available |
| 11193 | Sugarcane Farming | 0 | -100.0% | N/A | N/A | Not Available | Not Available |
| 111991 | Sugar Beet Farming | S | -50.0% | S | \$ 10,769 | Not Available | Not Available |
| 111992 | Peanut Farming | 0 | N/A | N/A | N/A | Not Available | Not Available |
| 1112 | Vegetable & Melon Farming | 240 | 4.9% | 0.6 | \$ 27,086 | 100.0% | 100.0% |
| 111998 | All Other Misc. Crop Farming | 740 | -29.1% | 4.6 | \$ 24,709 | Not Available | Not Available |
| 1121 | Cattle Ranching & Farming | 260 | 10.1% | 1.7 | \$ 22,731 | 100.0% | 100.0% |
| 1122 | Hog & Pig Farming | 0 | N/A | N/A | N/A | N/A | N/A |
| 1123 | Poultry & Egg Production | 0 | -100.0% | N/A | N/A | N/A | N/A |
| 1124 | Sheep & Goat Farming | < 10 | -57.1% | 0.6 | \$ 13,643 | 100.0% | 100.0% |
| 1125 | Animal Aquaculture | 40 | 7.7% | 6.7 | \$ 27,594 | 100.0% | 100.0% |
| 1129 | Other Animal Production | 180 | 15.4% | 7.7 | \$ 23,782 | 100.0% | 100.0% |
| 1141 | Fishing | 0 | -100.0% | N/A | N/A | N/A | N/A |
| 1142 | Hunting & Trapping | 0 | -100.0% | N/A | N/A | 100.0% | 100.0% |
| | Production Totals, Non- suppressed*** | 4,950 | -10.8% | 2.5 | \$ 23,419 | 99.8% | 98.7% |

^{*} Employment rounded to nearest 100. Numbers may not add due to rounding. "S" means employment was suppressed due to confidentiality.

*** LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

Support

Support is the second largest component of the region's Food Chain cluster, with 4,020 jobs in 2005. Support experienced job growth of 18.6%, up 630 jobs, from 2001 to 2005. Within Support, the largest industry by far is Support Activities for Crop Production, with over 2,580 jobs; this industry reported job growth of almost 540 jobs, up 26.3%, from 2001 to 2005. Second in size, Veterinary Services reported over 580 jobs in 2005, representing growth of almost 100 jobs since 2001, for an increase of 19.7%.

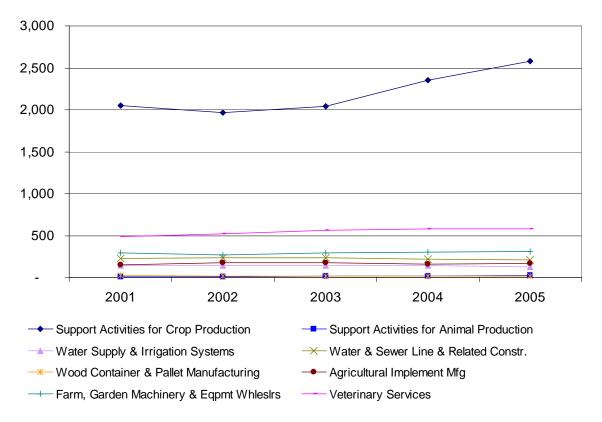
The job growth reported by Support Activities for Crop Production was the greatest number of jobs gained during this period. A small industry, Support Activities for Animal Production reported the fastest growth (up 175%). The greatest percentage of jobs lost during this period was reported by Wood Container & Pallet Manufacturing, down 25%.

^{***} Calculations made using this total may not match those in this report, as the report's findings are based on all data, including confidential

^{****} Some size of firm data was suppressed due to confidentiality. This may cause some industries to report 100% of firms with less than 50 or 100 employees when this is not actually the case.

Figure 41 graphs the employment change for the Support industries from 2001 to 2005.





The Northern Sacramento Valley Region has a higher concentration of Support jobs (1.5 LQ), compared to the statewide level. Those sub-sectors/industry groups with the highest concentrations include Agricultural Implement Manufacturing (6.3 LQ), Farm & Garden Machinery & Equipment Merchant Wholesalers (4.0 LQ), Water Supply & Irrigation Systems (2.5 LQ), and Veterinary Services (1.8 LQ).

Overall, Support reported an average annual wage of \$25,405 in 2005, which is lower than the region's average annual wage for all private industries of \$27,762, but up over 10% from 2001. The highest paying industry within Support is Water & Sewer Line & Related Structures Construction, with an average annual wage of \$48,250. The industry with the lowest average annual wage is Support Activities for Animal Production, at \$13,522.

Figure 42 provides a summary of economic facts for the Food Chain Support industries. (Size-of-business data were not available for industries defined at the five or six-digit NAICS code level.)

Figure 42 Food Chain - Support

| NAICS | Support | 2005 Empl* | Growth 01-05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl*** | Firms with < 50 empl*** |
|--------|--|---------------|-----------------|--------------|------------------------------|--------------------------------|-------------------------------|
| 1151 | Support Activities for Crop Production | 2,580 | 26.2% | 1.3 | \$ 20,987 | 96.6% | 85.5% |
| 1152 | Support Activities for Animal Production | 20 | 175.0% | 0.6 | \$ 13,522 | 100.0% | 100.0% |
| 22131 | Water Supply & Irrigation Systems | 130 | -15.0% | 2.5 | \$ 36,005 | Not Available | Not Available |
| 23711 | Water & Sewer Line & Rel. Construction | 210 | -10.0% | 0.9 | \$ 48,250 | Not Available | Not Available |
| 32192 | Wood Container & Pallet Mfg | 20 | -25.0% | 0.4 | \$ 24,716 | Not Available | Not Available |
| 3253 | Pesticide, Fertilizer & Other Ag.Chem. Mfg | S | 0.0% | S | \$ 36,666 | 100.0% | 100.0% |
| 33311 | Agricultural Implement Mfg | 170 | 12.4% | 6.3 | \$ 43,726 | Not Available | Not Available |
| 333294 | Food Product Machinery Mfg | S | S | S | \$ 29,143 | Not Available | Not Available |
| 42382 | Farm, Garden Machinery & Equip. Whlslrs | 310 | 5.8% | 4.0 | \$ 35,197 | Not Available | Not Available |
| 54194 | Veterinary Services | 580 | 19.7% | 1.8 | \$ 24,295 | Not Available | Not Available |
| | Support Totals | 4,020 | 19.3% | 1.5 | \$ 25,405 | 96.2% | 86.2% |

^{*} Employment rounded to nearest 100. Numbers may not add due to rounding. "S" means employment was suppressed due to confidentiality.

Processing

The Processing component of the Food Chain cluster is the third largest component in the Food Chain cluster, with 2,500 jobs in 2005 (some employment data was suppressed due to confidentiality). Processing experienced job growth of 2.3% from 2001 to 2005.

Within Processing, the largest industry is Fruit & Vegetable Preserving & Specialty Food Manufacturing, with over 1,370 jobs in 2005. Second, Grain & Oilseed Milling reported almost 530 jobs.

The largest number of jobs gained in Processing, for the period 2001to 2005, was reported by Breweries, up almost 100 jobs. The largest percentage of jobs gained was reported by Animal Slaughtering & Processing, up 110%.

The job losses in Processing from 2001 to 2005 were led by Soft Drink & Ice Manufacturing, down 100% and reporting no employment in 2004 or 2005, for a loss of over 110 jobs.

Figure 43 graphs the employment change for the Processing industries from 2001 to 2005. More information on each industry's size and growth are provided in **Figure 44**.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size of firm data was suppressed due to confidentiality. This may cause some industries to report 100% of firms with less than 50 or 100 employees when this is not actually the case.

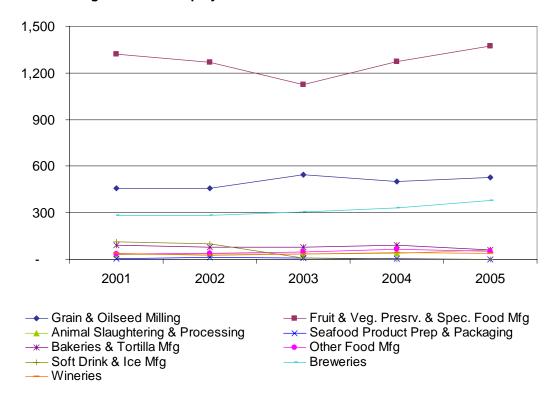


Figure 43 Processing Industries Employment Growth 2001-2005

The Northern Sacramento Valley Region has a slightly higher concentration of Processing jobs (I.I LQ) than found at the statewide level. Within Processing, the industry groups with high concentrations include Breweries (I0.3 LQ), Grain & Oilseed Milling (9.5 LQ), and Fruit & Vegetable Preserving & Specialty Food Manufacturing (3.4 LQ). The concentration for each Production industry is provided in **Figure 44**.

Overall, Processing reported an average annual wage of \$32,749 in 2005, which is higher than the region's average annual wage for all private industries of \$27,762. Within Processing, Grain & Oilseed Milling reported the highest average wage, at \$40,660, while Bakeries & Tortilla Manufacturing reported the lowest, at \$13,934, well below the regional average.

Figure 44 provides a summary of economic facts for the Food Chain Processing industries. (Size-of-business data were not available for industries defined at the five or six-digit NAICS code level.)

Figure 44 Food Chain - Processing

| NAICS | Processing | 2005 Emplymt* | 2001-2005 Growth | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl**** | Firms with < 50 empl**** |
|--------|--|------------------|---------------------|--------------|------------------------------|---------------------------------|--------------------------------|
| 3111 | Animal Food Manufacturing | S | -12.3% | S | \$ 39,334 | 100.0% | 100.0% |
| 3112 | Grain & Oilseed Milling | 530 | 15.3% | 9.5 | \$ 40,660 | 100.0% | 75.0% |
| 3113 | Sugar & Confectionery Product Mfg | S | -72.7% | S | \$ 10,592 | 100.0% | 100.0% |
| 3114 | Fruit & Veg. Presrv & Spec. Food Mfg | 1,370 | 4.0% | 3.4 | \$ 31,904 | 66.7% | 66.7% |
| 3115 | Dairy Product Manufacturing | S | -30.4% | S | \$ 26,094 | 100.0% | 100.0% |
| 3116 | Animal Slaughtering & Processing | 60 | 110.0% | 0.3 | \$ 28,732 | 100.0% | 100.0% |
| 3117 | Seafood Product Prep & Packaging | 0 | -100.0% | N/A | N/A | N/A | N/A |
| 3118 | Bakeries & Tortilla Mfg | 60 | -34.1% | 0.1 | \$ 13,934 | 100.0% | 100.0% |
| 3119 | Other Food Manufacturing | 50 | 55.9% | 0.2 | \$ 16,945 | 100.0% | 100.0% |
| 322215 | Nonfolding Sanitary Food Contnr Mfg | 0 | N/A | N/A | N/A | N/A | N/A |
| 32616 | Plastics Bottle Manufacturing | 0 | N/A | N/A | N/A | N/A | N/A |
| 327213 | Glass Container Manufacturing | 0 | N/A | N/A | N/A | N/A | N/A |
| 332115 | Crown and Closure Manufacturing | 0 | N/A | N/A | N/A | N/A | N/A |
| 332431 | Metal Can Manufacturing | 0 | N/A | N/A | N/A | N/A | N/A |
| 31211 | Soft Drink & Ice Manufacturing | 0 | -100.0% | N/A | N/A | N/A | N/A |
| 31212 | Breweries | 380 | 33.7% | 10.3 | \$ 32,939 | N/A | N/A |
| 31213 | Wineries | 40 | 2.5% | 0.1 | \$ 15,353 | N/A | N/A |
| 31214 | Distilleries | 0 | N/A | N/A | N/A | N/A | N/A |
| | Processing Totals, Non- suppressed*** | 2,500 | 2.3% | 1.1 | \$ 32,749 | 89.8% | 81.4% |

^{*} Employment rounded to nearest 100; when very small, rounded to nearest 10. Numbers may not add due to rounding. "S" means employment was suppressed due to confidentiality.

Distribution

Distribution is the smallest component of the region's Food Chain cluster, with 1,700 jobs in 2005. From 2001 to 2005, Distribution experienced job growth of about 60 jobs, up 3.6%. The largest industry within Distribution is Specialty Food Stores, with almost 570 jobs in 2005, followed by Grocery & Related Product Wholesalers with 400 jobs.

Four of the six industries within Distribution report job growth from 2001 to 2005. Growth was led by Farm Product Raw Material Merchant Wholesalers, with the greatest number and percentage of jobs gained, up over 110 jobs or 53.6%.

During this period, the greatest number and percentage of jobs lost was reported by Specialty Food Stores, down over 170 jobs or 23.5%.

Figure 45 graphs the employment change for the Distribution industries from 2001 to 2005. More information on each industry's size and growth are provided in **Figure 46**.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Calculations made using this total may not match those in this report, as the report's findings are based on all data, including confidential data.

^{*****} Some size of firm data was suppressed due to confidentiality. This may cause some industries to report 100% of firms with less than 50 or 100 employees than is actually the case.

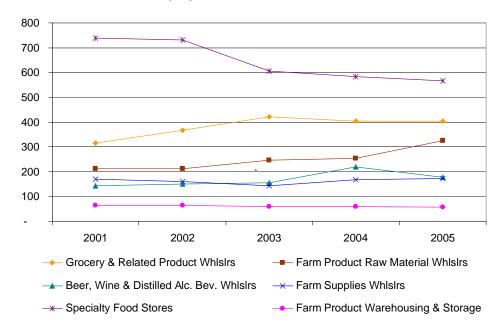


Figure 45 Distribution Industries Employment 2001-2005

The Northern Sacramento Valley Region has an equal concentration of Distribution jobs (1.0 LQ) as that found at the statewide level; however, all but one of the six industries have higher concentrations. The highest of these include Farm Product Raw Material Merchant Wholesalers (17.4 LQ), Farm Product Warehousing & Storage (10.4 LQ), and Farm Supplies Merchant Wholesalers (2.3 LQ). The concentration for each Distribution industry is provided in **Figure 46**.

Overall, Distribution reported an average annual wage of \$33,652 in 2005, which is higher than the region's average annual wage for all private industries of \$27,762. Within Distribution, Farm Supplies Merchant Wholesalers reported the highest average wage, at \$47,125, while Specialty Food Stores reported the lowest, at \$22,848.

Figure 46 provides a summary of economic facts for the Food Chain Distribution industries. (Size-of-business data were not available for industries defined at the five or six-digit NAICS code level. Some size-of-business data was suppressed.)

Figure 46 Food Chain - Distribution

| NAICS | Distribution | 2005 Emplymt* | Growth 01-05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 employees | < 100 |
|-------|---|------------------|-----------------|--------------|------------------------------|----------------------------------|---------------|
| 4244 | Grocery & Related Product Wholesalers | 400 | 28.3% | 0.4 | \$ 38,323 | 100.0% | 100.0% |
| 4245 | Farm Product Raw Material WhlsIrs | 320 | 53.6% | 17.4 | \$ 38,106 | 100.0% | 75.0% |
| 4248 | Beer, Wine, Distilled Alcoholic Bevg. WhlsIrs | 180 | 24.5% | 1.2 | \$ 37,377 | S | S |
| 42491 | Farm Supplies Merchant Wholesalers | 170 | 1.8% | 2.3 | \$ 47,125 | Not Available | Not Available |
| 4452 | Specialty Food Stores | 570 | -23.5% | 1.4 | \$ 22,848 | 100.0% | 100.0% |
| 49313 | Farm Product Warehousing & Storage | 60 | -11.1% | 10.4 | \$ 29,955 | Not Available | Not Available |
| | Distribution Totals | 1,700 | 3.6% | 1.0 | \$ 33,652 | 99.1% | 93.5% |

^{*} Employment rounded to nearest 100. Numbers may not add due to rounding.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{****} Some size of firm data was suppressed due to confidentiality. This may cause some industries to report 100% of firms with less than 50 or 100 employees than is actually the case.

CONSTRUCTION

The Construction industry provides 5.5% of the jobs for the Northern Sacramento Valley Region, with almost 9,630 jobs in 2005. From 2001 to 2005, employment increased by 27.3%, up over 2,060 jobs.

Two of the three sub-sectors reported growth during this period. Specialty Trade Contractors reported the greatest number of jobs gained, up over 1,530 jobs (33.5%), and Construction of Buildings reported greatest percentage of job growth, up 44.5% (over 730 jobs). Only Heavy & Civil Engineering Construction reported job losses, down almost 210 jobs, or 15.3%.

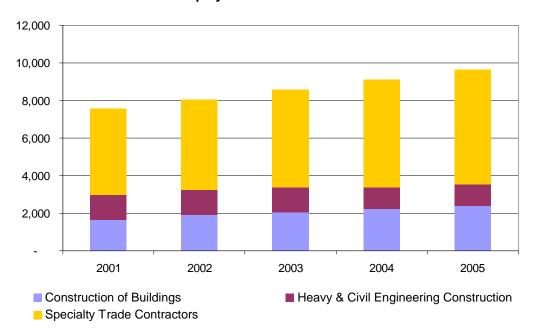


Figure 47 Construction Sub-sector Employment 2001-2005

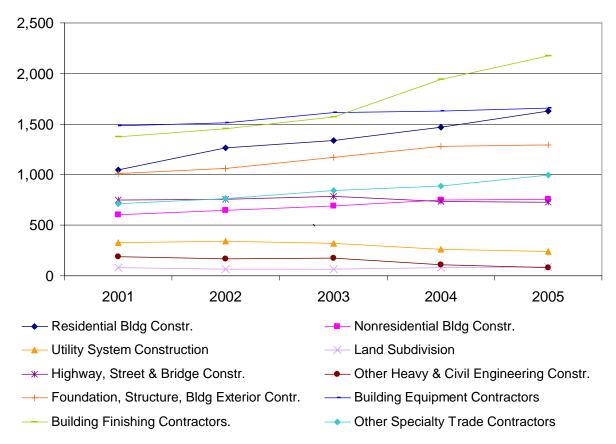
Within Construction of Buildings, the largest industry group is Residential Building Construction. Residential Building Construction reported job growth of 55% (up almost 580 jobs) from 2001-2005, and Nonresidential Building Construction reported job growth of 26.2% (up almost 160 jobs). Looking closer, the growth (in number of jobs added) in Residential Building Construction was led by New Single-Family Housing Construction.

Within Heavy & Civil Engineering Construction, the largest industry group is Highway, Street & Bridge Construction (almost 760 jobs in 2005), followed by Utility System Construction (240 jobs). Only Land Subdivision experienced job growth from 2001 to 2005, up just 5 jobs, or 6.3%. Other Heavy & Civil Engineering Construction reported the greatest job losses, down almost 110 jobs during this period, or 56.8%.

Within Specialty Trade Contractors, the largest industry group is Building Finishing Contractors, with 2,170 jobs in 2005. All four industries within the Specialty Trade Contractors sub-sector reported job growth from 2001 to 2005. Building Finishing Contractors added the most jobs, up 800 jobs, and reported the fastest growth (greatest percentage of jobs gained), up 58.4%.

Figure 48 shows employment growth for the Construction industries from 2001 to 2005.





The Northern Sacramento Valley Region has a slightly lower concentration of Construction jobs (0.9 LQ) than found statewide. Within Construction, looking at the industry level (five-digit NAICS code level), and across all sub-sectors, the industries with the highest concentrations include Siding Contractors (3.0 LQ), Highway, Street & Bridge Construction (2.3 LQ), Finish Carpentry Contractors (1.9 LQ), and Tile & Terrazzo Contractors (1.5 LQ). The concentration for each Construction industry is provided in **Figure 49**.

Overall, Construction reported an average annual wage of \$35,115 in 2005, which is higher than the region's average annual wage for all private industries of \$27,762. Within Construction, at the industry level (five-digit NAICS code level) the Highway, Street & Bridge Construction industry reported the highest average wage, at \$55,217, while the Roofing Contractors industry reported the lowest, at \$22,545.

Size of Business

From 2001 to 2005, the percentage of Construction industry businesses with fewer than 100 employees remained constant at 99.8% in 2001 and 99.7% in 2005. These businesses provided 97.2% of Construction employment in 2001, and 94.5% in 2005. In contrast, only 0.3% of the businesses in Construction employ 100 or more workers, and these businesses provide 5.5% of Construction jobs.

Figure 49 Distribution of Firms and Jobs in Construction by Size of Business in 2005

| Size Category (# employees) | % of Firms | % of Employment |
|--------------------------------|------------|--------------------|
| 0-4 | 59.0% | 14.0% |
| 5-9 | 20.2% | 18.4% |
| 10-19 | 12.3% | 22.6% |
| 20-49 | 7.1% | 28.0% |
| 50-99 | 1.2% | 11.4% |
| 100-249 | 0.3% | 5.5% |
| 250-499 | 0.0% | 0.0% |
| 500+ | 0.0% | 0.0% |

Businesses with fewer than 50 employees provided 83.1% of all Construction jobs in 2005; in comparison, businesses with fewer than 50 employees provided 58.7% of all of the region's private industry jobs. Looking at the smallest firms, those with fewer than 10 employees provided 32.5% of all Construction jobs, compared to 21.3% of all private industry jobs. The percentage of Construction firms with fewer than 100 employees and fewer than 50 employees, by industry, is included in **Figure 50.**

Figure 50 provides a summary of economic facts for the Construction industries.

Figure 50 Construction

| NAICS | Industry | 2005 Emplymt* | Growth 01-05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl*** | Firms with < 50 empl*** |
|-------|--|------------------|-----------------|--------------|------------------------------|--------------------------------|-------------------------|
| 2361 | Residential Bldg Constr. | 1,630 | 55.0% | 1.0 | \$ 32,730 | 100.0% | 100.0% |
| 2362 | Nonresidential Bldg Constr. | 760 | 26.2% | 1.0 | \$ 44,355 | 100.0% | 96.0% |
| 2371 | Utility System Constr. | 240 | -26.2% | 0.6 | \$ 47,515 | 100.0% | 100.0% |
| 2372 | Land Subdivision | 90 | 6.3% | 0.4 | \$ 46,855 | 100.0% | 100.0% |
| 2373 | Highway, Street & Bridge Constr. | 730 | -2.6% | 2.3 | \$ 55,217 | 100.0% | 91.1% |
| 2379 | Other Heavy & Civil Engineering Constr. | 80 | -56.8% | 0.7 | \$ 49,602 | 100.0% | 100.0% |
| 2381 | Found., Struct., Bldg Exter. Contractors | 1,290 | 27.6% | 0.7 | \$ 29,756 | 100.0% | 100.0% |
| 2382 | Bldg Equipmt Contractors | 1,650 | 11.3% | 0.7 | \$ 34,306 | 100.0% | 98.9% |
| 2383 | Bldg Finishing Contractors | 2,170 | 58.4% | 1.0 | \$ 28,407 | 100.0% | 98.4% |
| 2389 | Other Specialty Trade Contractors | 1,000 | 40.1% | 1.2 | \$ 35,045 | 100.0% | 100.0% |

^{*} Employment rounded to nearest 10.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size-of-firm data may have been suppressed due to confidentiality, thus affecting the percentages reported.

MANUFACTURING VALUE CHAIN

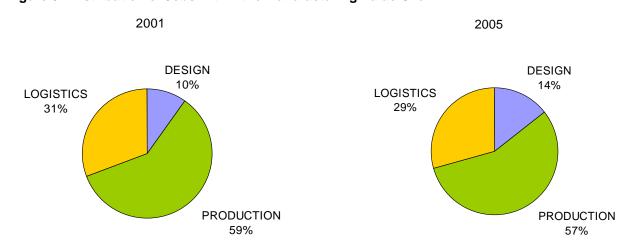
California's manufacturing industry has undergone a transformation. While traditional manufacturing (production) jobs have declined since the 1990's, job growth has occurred in the design and logistics (warehousing and delivery) phases of manufacturing. Improvements in production technology have increased production, as measured in gross domestic product, but have reduced the number of production jobs. At the same time, the "just in time" approach to supply and delivery is lowering warehousing costs and has increased the number and types of jobs in logistics.

The California Regional Economies Project calls this industry cluster the Manufacturing Value Chain. Manufacturing industries are important for innovation, high wages and exports. The design and logistics components of manufacturing are providing more middle and higher-level jobs that pay well and offer career development opportunities. By definition, the Manufacturing Value Chain includes some of the manufacturing industries discussed in the economic base analysis, under High Tech Manufacturing and Diversified Manufacturing, presented earlier in this report. This section of the report takes a look at a broader range of manufacturing activities in the region.

The Manufacturing Value Chain provided 10.1% of the Northern Sacramento Valley Region's jobs, with over 16,430 jobs in 2005. (Some employment was suppressed due to confidentiality.) From 2001 to 2005, this cluster experienced job losses of 4.2%. Design reported growth, while Production and Logistics reported job losses during this period.

Within the Manufacturing Value Chain cluster, the percentage of jobs made up by each component has changed over time. In 2001, Design represented 10% of the jobs within the cluster; this grew to 14% by 2005. At the same time, Production went from 59% in 2001 down to 57% in 2005. Logistics' share of the jobs in the cluster also changed, from 31% in 2001 to 29% in 2005. **Figure 51** illustrates these changes.

Figure 51 Distribution of Jobs within the Manufacturing Value Chain



Overall, the Northern Sacramento Valley Region's concentration of Manufacturing Value Chain cluster jobs is lower (0.7 LQ) than that found statewide; however, the region has a higher concentration in several industries within the cluster, representing a competitive advantage in these areas. The highest of these include Sawmills & Wood Preservation (27.6 LQ), Grain & Oilseed Milling (9.5 LQ), Other Nonmetallic Mineral Product Manufacturing (7.1 LQ), Agriculture, Construction & Mining Machinery Manufacturing (4.0 LQ), Fruit & Vegetable Preserving & Specialty Food Manufacturing (3.4 LQ), General Freight Trucking (2.3 LQ), Boiler, Tank & Shipping Container Manufacturing (2.1 LQ), and Warehousing & Storage (2.0 LQ). Figures 55, 57 and 59 provide further data on concentrations of jobs by industry in each component of the value chain.

The Manufacturing Value Chain cluster's average annual wage for the region in 2005 was \$38,589, higher than the region's average for all private industry jobs, at \$27,762. Within the cluster, the component with the highest average annual wage is Logistics, with an average of \$39,190 in 2005. The average annual wage for Design was \$38,357 in 2005, and the average for Production was \$38,332 in 2005.

Size of Business

From 2001 to 2005, the percentage of Manufacturing Value Chain businesses with fewer than 100 employees increased slightly, from 96.6% in 2001 to 97.3% in 2005. These businesses provided 21.7% of Manufacturing Value Chain employment in 2001, and 54.2% in 2005. In contrast, only 2.7% of the businesses in Manufacturing Value Chain employ 100 or more workers, and these businesses provide 45.8% of Manufacturing Value Chain jobs.

| Figure 52 Distribution | af F:a a.a.al lak | - ! Mf | Value Ohele bu Oles | -f D!! 2005 |
|------------------------|-------------------|--------|---------------------|-------------|
| | | | | |
| | | | | |

| Size Category (# employees) | % of Firms | % of Employment |
|--------------------------------|------------|--------------------|
| 0-4 | 49.7% | 4.7% |
| 5-9 | 19.2% | 7.2% |
| 10-19 | 15.4% | 11.8% |
| 20-49 | 9.4% | 16.1% |
| 50-99 | 3.7% | 14.3% |
| 100-249 | 1.6% | 13.5% |
| 250-499 | 0.8% | 18.3% |
| 500+ | 0.3% | 14.1% |

Businesses with fewer than 50 employees provided 39.8% of all Manufacturing Value Chain jobs in 2005; in comparison, businesses with fewer than 50 employees provided 58.7% of all of the region's private industry jobs. Looking at the smallest firms, those with fewer than 10 employees provided 11.9% of all Manufacturing Value Chain jobs, compared to 21.3% of all private industry jobs.

The percentage of Manufacturing Value Chain firms with fewer than 100 employees and fewer than 50 employees, by cluster component, is included in **Figure53**. Some of the size-of-firm data was suppressed due to confidentiality, causing a higher (than actual) number of industries to report 100% of their firms as having less than 100 or 50 employees.

Figure 53 provides a summary of facts for the Manufacturing Value Chain cluster components.

Figure 53 Manufacturing Value Chain

| Component | 2005 Empl* | Growth 01-05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl*** | Firms with < 50 empl*** |
|----------------------------|------------|-----------------|--------------|------------------------------|--------------------------|-------------------------|
| Design | 2,540 | 38.2% | 0.6 | \$ 38,357 | 100.0% | 99.1% |
| Production | 8,730 | -9.3% | 0.6 | \$ 43,678 | 95.5% | 88.2% |
| Logistics | 5,160 | -8.2% | 1.2 | \$ 39,593 | 98.4% | 96.2% |
| Manufacturing Chain Totals | 16,430 | -4.2% | 0.7 | \$ 41,572 | 97.3% | 93.6% |

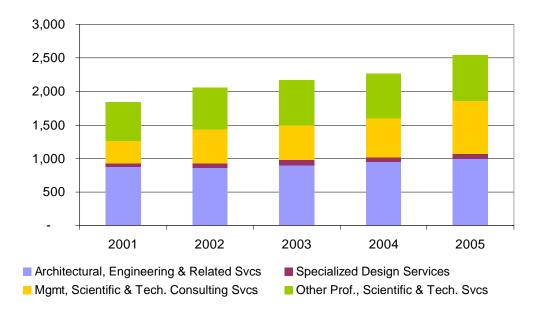
^{*} Employment rounded to nearest 10. Some employment was suppressed due to confidentiality.

Design

The Design component of the Manufacturing Value Chain provided 2540 jobs for the region in 2005, and grew by 700 jobs, or 38.2%, from 2001 to 2005.

Within Design, Architectural, Engineering & Related Services is the largest industry group with 990 jobs in 2005; this industry reported job growth of almost 120 jobs or 13.1% from 2001 to 2005. Management, Scientific & Technical Consulting Services is the second largest industry in Design, with 790 jobs in 2005, followed by Other Professional, Scientific & Technical Services with 680 jobs. Management, Scientific & Technical Consulting Services reported the greatest number and percentage of jobs gained during the period, up almost 460 jobs or 136.1% from 2001 to 2005.

Figure 54 Design Employment 2001-2005



^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size-of-firm data may have been suppressed due to confidentiality, thus affecting the percentages reported.

The Northern Sacramento Valley Region has a lower concentration of Design jobs (0.6 LQ) than found at the statewide level; however, Other Professional, Scientific & Technical Services reported a slightly higher concentration than found statewide, at I.I LQ. **Figure 55** shows the concentration for each Design industry group.

Overall, the average annual wage for the Design industries was \$38,357 in 2005; this was up from \$36,271 in 2001, an increase of 21.6%. Within Design, the highest average annual wage was reported by Architectural, Engineering & Related Services, at \$55,094 in 2005, and the lowest was reported by Other Professional, Scientific & Technical Services, at \$24,011.

Figure 55 provides a summary of economic facts for the Design industries.

Figure 55 Manufacturing Value Chain - Design

| NAICS | Industry | 2005 Emplo ymt* | Growth 01-05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl*** | Firms with < 50 empl*** |
|-------|-------------------------------------|-----------------------|-----------------|--------------|------------------------------|-----------------------------------|----------------------------------|
| 5413 | Architect., Engineering & Rel. Svcs | 990 | 13.1% | 0.5 | \$ 55,094 | 100.0% | 100.0% |
| 5414 | Specialized Design Svcs | 80 | 65.2% | 0.3 | \$ 26,412 | 100.0% | 100.0% |
| 5416 | Mgmt, Sci. & Tech.Consulting Svcs | 790 | 136.1% | 0.5 | \$ 30,883 | 100.0% | 97.6% |
| 5419 | Other Prof, Scientific & Tech Svcs | 680 | 17.4% | 1.1 | \$ 24,011 | 100.0% | 100.0% |
| | Design Totals | 2,540 | 38.2% | 0.6 | \$ 38,357 | 100.0% | 99.1% |

^{*} Employment rounded to nearest 100. Numbers may not add due to rounding.

Production

The Production component of the Manufacturing Value Chain provided over 8,730 jobs in 2005, or 57% of the cluster's jobs in 2005 and 5.6% of all of the region's jobs. The sector experienced job losses from 2001 to 2005, declining by 9.3%. (Some employment was suppressed due to confidentiality, which affects the reportable employment totals.)

Within Production, the largest industry is Sawmills & Wood Preservation, with 2,400 jobs in 2005, and the industry reported the highest number of jobs gained from 2001 to 2005, up almost 310 jobs. The second largest industry is Fruit & Vegetable Preserving & Specialty Food Manufacturing, with almost 1,370 jobs in 2005; this industry reported the growth over 50 jobs, up 4%%.

Job losses in Production were led by Converted Paper Product Manufacturing, down almost 270 jobs (-56%), followed by Pulp, Paper & Paperboard Mills, down over 250 jobs (-100%), and Other Wood Product Manufacturing, down over 230 jobs (-32.5%). Several industries reported 100% job losses, with no employment reported in 2005.

Figure 56 shows the employment change from 2001 to 2005 for the ten largest industry groups within Production, based on 2005 employment. Employment change for all Production industry groups is presented in **Figure 57**.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size of firm data was suppressed due to confidentiality, affecting the percentages reported here.

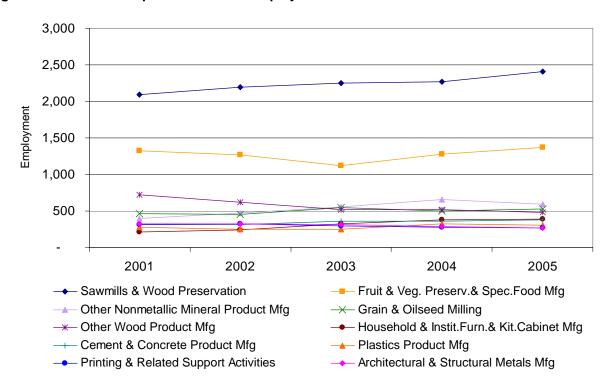


Figure 56 Production Top Ten Industries Employment 2001-2005

The Northern Sacramento Valley Region has a lower concentration of Production jobs (0.6 LQ) overall than found at the statewide level; however, many industries within Production have higher concentrations, indicating a possible competitive advantage for the region in these areas. The highest of these include Sawmills & Wood Preservation (27.6 LQ); Grain & Oilseed Milling (9.5 LQ), Other Nonmetallic Mineral Product Manufacturing (7.1 LQ), Agriculture, Construction & Mining Machinery Manufacturing (4.0 LQ), Fruit & Vegetable Preserving & Specialty Food Manufacturing (3.4 LQ), and Boiler, Tank & Shipping Container Manufacturing (2.1 LQ).

Overall, the average annual wage for the Production industries was \$38,332 in 2005, up from \$34,393 in 2001 (up 11.5%), and is higher than the region's average wage for all private industry jobs (\$27,762 in 2005). Within Production, the highest average annual wage was reported by Manufacturing & Reproducing Magnetic & Optical Media, at \$74,770 in 2005. The lowest average wage was reported by Sugar & Confectionery Product Manufacturing, at \$10,592, which is significantly lower than the regional average.

Figure 57 provides a summary of economic facts for the Production industries.

Figure 57 Manufacturing Value Chain - Production

| NAICS | Industry | 2005 Empl* | Growth 01-05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl*** | Firms with < 50 empl*** |
|-------|---|---------------|-----------------|--------------|---------------------------------|-----------------------------------|----------------------------------|
| 3111 | Animal Food Mfg | S | -12.3% | S | \$ 39,334 | 100.0% | 100.0% |
| 3112 | Grain & Oilseed Milling | 530 | 15.3% | 9.5 | \$ 40,660 | 100.0% | 75.0% |
| 3113 | Sugar & Confectionery Product Mfg | S | -72.7% | S | \$ 10,592 | S | S |
| 3114 | Fruit & Veg Presrv. & Spec.Food Mfg | 1,370 | 4.0% | 3.4 | \$ 31,904 | 66.7% | 66.7% |
| 3115 | Dairy Product Mfg | S | -30.4% | S | \$ 26,094 | S | S |
| 3116 | Animal Slaughtering & Processing | 60 | 110.0% | 0.3 | \$ 28,732 | S | S |
| 3117 | Seafood Product Prep & Packaging | 0 | -100.0% | N/A | N/A | N/A | N/A |
| 3118 | Bakeries & Tortilla Mfg | 60 | -34.1% | 0.1 | \$ 13,934 | S | S |
| 3119 | Other Food Mfg | 50 | 55.9% | 0.2 | \$ 16,945 | 100.0% | 100.0% |
| 3121 | Beverage Mfg | S | -3.9% | S | \$ 31,230 | S | S |
| 3122 | Tobacco Mfg | 0 | N/A | N/A | N/A | N/A | N/A |
| 3131 | Fiber, Yarn & Thread Mills | 0 | N/A | N/A | N/A | N/A | N/A |
| 3132 | Fabric Mills | 0 | N/A | N/A | N/A | N/A | N/A |
| 3133 | Textile, Fabric Finishing & Coating Mills | 0 | -100.0% | N/A | N/A | N/A | N/A |
| 3141 | Textile Furnishings Mills | 0 | -100.0% | N/A | N/A | N/A | N/A |
| 3149 | Other Textile Product Mills | 50 | 0.0% | 0.6 | \$ 20,067 | 100.0% | 100.0% |
| 3151 | Apparel Knitting Mills | 0 | N/A | N/A | N/A | N/A | N/A |
| 3152 | Cut & Sew Apparel Mfg | 30 | 55.6% | 0.03 | \$ 19,463 | 100.0% | 100.0% |
| 3159 | Apparel Acces. & Other Apparel Mfg | 0 | N/A | N/A | N/A | N/A | N/A |
| 3161 | Leather & Hide Tanning & Finishing | 0 | N/A | N/A | N/A | N/A | N/A |
| 3162 | Footwear Mfg | 0 | N/A | N/A | N/A | N/A | N/A |
| 3169 | Other Leather & Allied Product Mfg | S | -84.9% | S | \$ 17,424 | S | S |
| 3211 | Sawmills & Wood Preservation | 2,400 | 14.6% | 27.6 | \$ 45,582 | 27.3% | S |
| 3212 | Veneer, Plywood & Eng. Wood Prod. Mfg | 110 | 9.6% | 1.4 | \$ 42,224 | S | S |
| 3219 | Other Wood Product Mfg | 490 | -32.5% | 1.8 | \$ 31,215 | 100.0% | 64.3% |
| 3221 | Pulp, Paper & Paperboard Mills | 0 | -100.0% | N/A | N/A | N/A | N/A |
| 3222 | Converted Paper Product Mfg | 210 | -56.0% | 0.7 | \$ 44,859 | S | S |
| 3231 | Printing & Related Support Activities | 270 | -13.9% | 0.4 | \$ 25,002 | 100.0% | 100.0% |
| 3241 | Petroleum & Coal Products Mfg | S | 0.0% | S | \$ 51,022 | S | S |
| 3251 | Basic Chemical Mfg | 0 | N/A | N/A | N/A | N/A | N/A |
| 3252 | Resin, Synth. Rubber, Artif. Fibers Mfg | S | 200.0% | S | \$ 20,260 | S | S |
| 3253 | Pesticide, Fertilizer & Other Agri. Chem. Mfg | S | 0.0% | S | \$ 36,666 | S | S |
| 3255 | Paint, Coating, & Adhesive Mfg | S | 5.6% | S | \$ 43,196 | S | S |
| 3256 | Soap, Cleaning Compd, & Toilet Prep Mfg | S | -45.1% | S | \$ 44,723 | S | S |
| 3259 | Other Chemical Product & Prep Mfg | S | 366.7% | S | \$ 41,516 | S | S |
| 3261 | Plastics Product Mfg | 310 | 10.0% | 0.5 | \$ 36,077 | 100.0% | 100.0% |
| 3262 | Rubber Product Mfg | S | -12.5% | S | \$ 39,974 | S | S |
| 3271 | Clay Product & Refractory Mfg | 30 | 42.1% | 0.5 | \$ 26,532 | S | S |
| 3272 | Glass & Glass Product Mfg | 30 | -26.8% | 0.3 | \$ 24,528 | 100.0% | 100.0% |
| 3273 | Cement & Concrete Product Mfg | 380 | 21.6% | 1.4 | \$ 48,452 | 100.0% | 100.0% |
| 3274 | Lime & Gypsum Product Mfg | S | 100.0% | S | \$ 40,726 | S | S |
| 3279 | Other Nonmetallic Mineral Product Mfg | 590 | 50.1% | 7.1 | \$ 47,945 | S | S |
| 3311 | Iron & Steel Mills & Ferroalloy Mfg | 0 | N/A | N/A | N/A | N/A | N/A |
| 3312 | Steel Product Mfg from Purchased Steel | 0 | -100.0% | N/A | N/A | N/A | N/A |

| 3313 | Alumina & Aluminum Prodctn & Proc. | 0 | N/A | N/A | N/A | N/A | N/A |
|-----------|---|-------|---------|------|-----------|--------|--------|
| 3314 | Nonferrous Metal Production & Proc. | 0 | N/A | N/A | N/A | N/A | N/A |
| 3315 | Foundries | S | -96.3% | S | \$ 22,919 | S | S |
| 3321 | Forging & Stamping | S | 250.0% | S | \$ 37,756 | S | S |
| 3322 | Cutlery & Handtool Mfg | S | -76.9% | S | \$ 34,043 | S | S |
| 3323 | Architectural & Structural Metals Mfg | 260 | -19.5% | 0.6 | \$ 33,430 | 100.0% | 100.0% |
| 3324 | Boiler, Tank, & Shipping Container Mfg | 150 | -2.0% | 2.1 | \$ 35,881 | S | S |
| 3325 | Hardware Mfg | 0 | -100.0% | N/A | N/A | N/A | N/A |
| 3326 | Spring & Wire Product Mfg | S | -50.0% | S | S | S | S |
| 3327 | Machine Shops Mfg | 130 | -4.4% | 0.3 | \$ 29,509 | 100.0% | 100.0% |
| 3328 | Coating, Engraving, Heat Treatng Activ. | 30 | -49.2% | 0.2 | \$ 34,423 | 100.0% | 100.0% |
| 3329 | Other Fabricated Metal Product Mfg | 50 | -69.0% | 0.2 | \$ 27,314 | 100.0% | 100.0% |
| 3331 | Ag, Construction, & Mining Machinery Mfg | 240 | 16.3% | 4.0 | \$ 44,794 | 100.0% | 100.0% |
| 3332 | Industrial Machinery Mfg | 220 | 3.3% | 1.2 | \$ 39,725 | 100.0% | 100.0% |
| 3333 | Commercial & Svc Ind. Machinery Mfg | S | -80.3% | S | \$ 62,011 | 100.0% | 100.0% |
| 3334 | Ventil., Heatg, Air-Cond & Refrig. Mfg | S | -71.4% | S | \$ 15,204 | S | S |
| 3335 | Metalworking Machinery Mfg | 20 | -48.7% | 0.1 | \$ 41,901 | 100.0% | 100.0% |
| 3336 | Engine, Turbine & Transmissn Eqpmt Mfg | 0 | N/A | N/A | N/A | N/A | N/A |
| 3339 | Other General Purpose Machinery Mfg | 50 | -13.3% | 0.2 | \$ 40,107 | S | S |
| 3341 | Computer & Peripheral Equipment Mfg | S | -17.6% | S | \$ 30,368 | S | S |
| 3342 | Communications Equipment Mfg | S | -27.3% | S | \$ 30,595 | S | S |
| 3343 | Audio & Video Equipment Mfg | 0 | N/A | N/A | N/A | N/A | N/A |
| 3344 | Semiconductor & Other Elec Comp Mfg | 10 | 18.2% | 0.01 | \$ 30,626 | 100.0% | 100.0% |
| 3345 | Navigational, & Electr. Instruments Mfg | S | 13.8% | S | \$ 41,377 | S | S |
| 3346 | Mfg & Reprod. Magnetic, Optical Media | S | -58.1% | S | \$ 74,770 | S | S |
| 3351 | Electric Lighting Equipment M Mfg | S | 0.0% | S | S | S | S |
| 3352 | Household Appliance Mfg | S | -82.6% | S | \$ 15,754 | S | S |
| 3353 | Electrical Equipment Mfg | 90 | -14.2% | 0.9 | \$ 31,053 | S | S |
| 3359 | Other Elec. Equipmt & Component Mfg | S | -99.0% | S | \$ 69,434 | 100.0% | 100.0% |
| 3361 | Motor Vehicle Mfg | S | -50.0% | S | \$ 24,574 | S | S |
| 3362 | Motor Vehicle Body & Trailer Mfg | 0 | -100.0% | N/A | N/A | N/A | N/A |
| 3363 | Motor Vehicle Parts Mfg | 40 | -31.4% | 0.2 | \$ 28,454 | 100.0% | 100.0% |
| 3364 | Aerospace Product & Parts Mfg | S | 200.0% | S | \$ 36,252 | S | S |
| 3371 | Househld, Instit. Furn & Kit. Cabinet Mfg | 390 | 81.0% | 0.8 | \$ 27,235 | 100.0% | 100.0% |
| 3372 | Office Furniture (including Fixtures) Mfg | 60 | -41.2% | 0.4 | \$ 42,855 | 100.0% | 100.0% |
| 3379 | Other Furniture Related Product Mfg | S | 0.0% | S | \$ 18,878 | S | S |
| | Production Totals, | | | | | | |
| * Employ: | Non-suppressed**** nent rounded to nearest 100. Numbers may not a | 8,730 | -9.3% | 0.6 | \$ 38,332 | 95.5% | 88.2% |

^{*} Employment rounded to nearest 100. Numbers may not add due to rounding. "S" means employment was suppressed due to confidentiality.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

*** Some size of firm data was suppressed due to confidentiality, affecting the percentages reported. "S" means all size of firm data was

suppressed for that industry.

^{****} Calculations made using this total may not match those in this report, as the report's findings are based on all data, including confidential data.

Logistics

The Logistics component of the Manufacturing Value Chain provided 29% of the cluster's jobs in 2005, at 5,160 jobs in 2005. Logistics lost about 490 jobs from 2001 to 2005, down 8.2%, led by losses in Warehousing & Storage (down over 310 jobs).

Within Logistics, the largest industry is General Freight Trucking, providing 1,850 jobs in 2005; this industry experienced the loss of about 10 jobs, or 0.5%, from 2001 to 2005. The second largest industry is Warehousing & Storage, with 1,430 jobs in 2005, followed by Specialized Freight Trucking, with almost 840 jobs.

From 2001 to 2005, the greatest number of jobs gained was reported by Support Activities for Road Transportation, up almost 40 jobs. The greatest percentage of job growth (fastest growth) was reported by Freight Transportation Arrangement, up 160%. This is a very small industry, and employment was suppressed due to confidentiality.

Figure 58 shows the employment change for the five largest industries within Logistics, from 2001 to 2005.

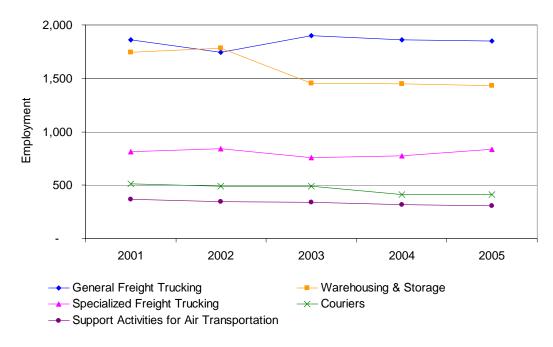


Figure 58 Logistics Top Five Industries Employment 2001-2005

The Northern Sacramento Valley Region has a higher concentration of Logistics jobs overall (1.2 LQ) than found at the statewide level. The industry groups reporting the highest concentrations include General Freight Trucking (2.3 LQ), Warehousing & Storage (2.0 LQ), Specialized Freight Trucking (1.7 LQ), and Support Activities for Air Transportation (1.6 LQ).

Overall, the average annual wage for the Logistics industries was \$39,190 in 2005, up from \$32,898 in 2001, an increase of 19.1%. Other Pipeline Transportation reported the highest average wage, at \$72,866, while Other Support Activities for Transportation reported the lowest, at \$18,820. These are very small industries.

Figure 59 provides a summary of economic facts for the Logistics industries.

Figure 59 Manufacturing Value Chain - Logistics

| NAICS | Industry | 2005 Emplymt* | Growth 01-05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 empl*** | Firms with < 50 empl*** |
|-------|--|------------------|-----------------|--------------|---------------------------------|--------------------------|----------------------------------|
| 4811 | Scheduled Air Transportation | 100 | -41.8% | 0.2 | \$ 20,880 | S | S |
| 4812 | Nonscheduled Air Transportation | 40 | 2.7% | 0.8 | \$ 57,571 | 100.0% | 100.0% |
| 4821 | Rail Transportation | 0 | N/A | N/A | N/A | N/A | N/A |
| 4831 | Deep Sea, Coastal Water Transp. | 0 | N/A | N/A | N/A | N/A | N/A |
| 4832 | Inland Water Transportation | 0 | N/A | N/A | N/A | N/A | N/A |
| 4841 | General Freight Trucking | 1,850 | -0.5% | 2.3 | \$ 47,358 | 100.0% | 100.0% |
| 4842 | Specialized Freight Trucking | 840 | 2.5% | 1.7 | \$ 35,019 | 100.0% | 97.4% |
| 4861 | Pipeline Transportation of Crude Oil | 0 | N/A | N/A | N/A | N/A | N/A |
| 4862 | Pipeline Transp. of Natural Gas | S | 125.0% | S | S | S | S |
| 4869 | Other Pipeline Transportation | S | -52.9% | S | \$ 72,866 | S | S |
| 4881 | Support Activities for Air Transp. | 300 | -16.7% | 1.6 | \$ 41,025 | 100.0% | 100.0% |
| 4882 | Support Activities for Rail Transp. | S | 900.0% | S | \$ 24,617 | S | S |
| 4883 | Support Activities for Water Transp. | S | -100.0% | S | S | S | S |
| 4884 | Support Activities for Road Transp. | 150 | 30.8% | 1.0 | \$ 26,899 | 100.0% | 100.0% |
| 4885 | Freight Transportation Arrangement | S | 160.0% | S | \$ 35,400 | S | S |
| 4889 | Other Support Activities for Transp. | 10 | 700.0% | 0.2 | \$ 18,820 | 100.0% | 100.0% |
| 4911 | Postal Service | S | 100.0% | S | \$ 25,545 | S | S |
| 4921 | Couriers | 410 | -19.9% | 0.6 | \$ 42,333 | 100.0% | 100.0% |
| 4922 | Local Messengers & Local Delivery | 30 | 30.8% | 0.3 | \$ 28,509 | S | S |
| 4931 | Warehousing & Storage | 1,430 | -18.0% | 2.0 | \$ 31,363 | 100.0% | 100.0% |
| Nr | Logistics Totals, Non-supressed**** | 5,160 | -8.2% | 1.2 | \$ 39,190 | 98.4% | 96.2% |

^{*} Employment rounded to nearest 100. Numbers may not add due to rounding. "S" means employment was suppressed due to confidentiality.

** LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

HEALTH SCIENCES & SERVICES

The Health Sciences and Services cluster integrates two critical components of the health industry: Health sciences include activities focused on the development of a body of knowledge through scientific research in medicine, pharmacology, biology, drug discovery, genomics, and many other areas. Health services focus on the delivery of health care to patients; employment in this sector is comprised of medical and support staff in many settings, including hospitals, clinics, care facilities, at home, and on-line.

The Health Sciences & Services cluster includes health care services, such as offices of physicians, dentists, other health practitioners and other outpatient care facilities; hospitals; laboratories; home health care; nursing care and other residential care facilities. It also includes community, emergency and other relief services; vocational rehabilitation services; and, death

^{***} Some size of firm data was suppressed due to confidentiality, causing a high number of industries to report 100% of their firms with less than 50 or 100 employees than actually exist. "S" means all size of firm data was suppressed for that industry.

^{****} Calculations made using this total may not match those in this report, as the report's findings are based on all data, including confidential data.

care services. Within health sciences, the cluster includes pharmaceutical and medicine manufacturing; medical equipment and supplies manufacturing; and, scientific research and development (R&D) services.

In 2005, the Health Sciences & Services cluster provided almost 21,560 jobs, or 12.3% of all jobs in the region, and experienced overall growth of about 1,460 jobs, or 7.2%, from 2001 to 2005. The Health Sciences component of this cluster reported about 390 jobs in 2005, and the Health Services component reported almost 21,170 jobs.

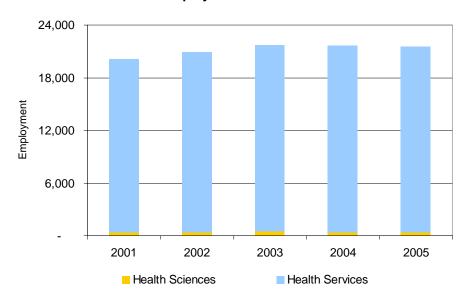


Figure 60 Health Sciences & Services Employment 2001-2005

Size of Business

From 2001 to 2005, the percentage of Health Sciences & Services businesses with fewer than 100 employees remained fairly constant, from 97.7% in 2001 to 97.95% in 2005. These businesses provided 53.2% of Health Sciences & Services employment in 2001, and 56.1% in 2005. In contrast, only 2.1% of the businesses in Health Sciences & Services employ 100 or more workers, and these businesses provide 43.9% of Health Sciences & Services jobs.

| - A4 B1 4 11 41 | | | 0. (5 |
|------------------------|-----------------------------|-----------------------|-----------------------------|
| Figure 61 Distribution | of Firms and Jobs in Health | Sciences & Services r | ov Size of Business in 2005 |

| Size Category (# employees) | % of Firms | % of Employment* |
|-----------------------------|------------|---------------------|
| 0-4 | 48.6% | 6.3% |
| 5-9 | 23.5% | 9.7% |
| 10-19 | 15.4% | 12.9% |
| 20-49 | 7.2% | 13.7% |
| 50-99 | 3.0% | 13.5% |
| 100-249 | 1.9% | 16.1% |
| 250-499 | 0.1% | 2.0% |
| 500+ | 0.3% | 25.8% |

^{*} Percentages may not add to 100% due to rounding.

Businesses with fewer than 50 employees provided 42.6% of all Health Sciences & Services jobs in 2005; in comparison, businesses with fewer than 50 employees provided 58.7% of all of the region's private industry jobs. Looking at the smallest firms, those with fewer than 10 employees provided 16% of all Health Sciences & Services jobs, compared to 21.3% of all private industry jobs.

Health Sciences reported 100.0% of its firms as having fewer than 100 employees in 2005, while Health Services reported 97.8%. The percentage of Health Sciences & Services firms with fewer than 100 employees and fewer than 50 employees, by cluster component, is included in **Figure 62**.

The Northern Sacramento Valley Region has a higher concentration of Health Sciences & Services jobs (I.4 LQ) than found at the statewide level. Health Services has the highest concentration of the two components (I.6 LQ), while Health Sciences has a very low concentration (0.2 LQ).

Figure 62 provides a summary of facts for the Health Sciences & Services cluster components.

Figure 62 Health Sciences & Services

| Component | 2005 Empl* | Growth 01-05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 Empl*** | Firms with < 50 Empl*** |
|-------------------------------|---------------|-----------------|--------------|------------------------------|--------------------------------|-------------------------------|
| Health Sciences | 390 | 0.0% | 0.2 | \$ 33,801 | 100.0% | 100.0% |
| Health Services | 21,170 | 7.4% | 1.6 | \$ 37,032 | 97.8% | 94.8% |
| Health Sciences & Svcs Totals | 21,560 | 7.2% | 1.4 | \$ 36,974 | 97.9% | 94.9% |

^{*} Employment rounded to nearest 10. Total employment may not equal sum of components due to rounding.

Health Sciences

Health Sciences is the smaller of the two components in the region's Health Sciences & Services cluster, reporting about 390 jobs in 2005. Health Sciences experienced no change in overall jobs 2001 to 2005 (0% change). One industry groups reported job growth during this period. Scientific R & D Services gained 10 jobs (up 6.8%), while the Medical Equipment & Supplies Manufacturing industry groups reported the loss of 10 jobs (-4.1%), for zero net change.

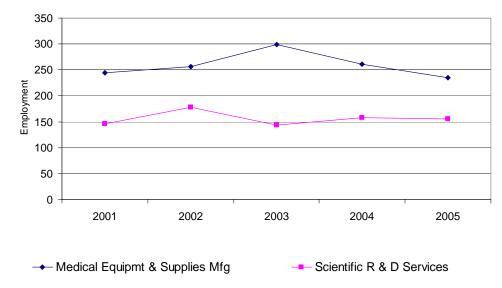
The largest industry group within Health Sciences is Medical Equipment & Supplies Manufacturing, with almost 240 jobs in 2005. There was no employment in the Pharmaceutical & Medicine Manufacturing sub-sector during this time.

Figure 63 shows employment change for the Health Sciences industry groups from 2001 to 2005.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size of firm data was suppressed due to confidentiality, causing a high number of industries to report 100% of their firms with less than 50 or 100 employees than actually exist. "S" means all size of firm data was suppressed for that industry.

Figure 63 Health Sciences Industries Employment 2001-2005



The region has a very low concentration of Health Sciences jobs (0.2 LQ) compared to the statewide level, and this is true for both industry groups within Health Sciences that reported employment during this period.

The average annual wage for Health Sciences was \$33,801 in 2005, which represents an increase of 7.9% since 2001. The Health Sciences average annual wage is higher than the regional average for all private industry of \$27,762. Within Health Sciences, the highest average wage was reported by Medical Equipment & Supplies Manufacturing, at \$34,528; the lowest was reported by Scientific Research & Development Services, at \$32,706.

Figure 64 provides a summary of economic facts for the Health Sciences industries.

Figure 64 Health Sciences & Services Cluster - Health Sciences

| NAICS | Industry | 2005 Employmt* | Growth 01-05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 Empl*** | Firms with < 50 Empl*** |
|-------|----------------------------------|-------------------|-----------------|--------------|------------------------------|--------------------------------|-------------------------------|
| 3254 | Pharmaceutical & Medicine Mfg | 0 | N/A | N/A | N/A | N/A | N/A |
| 3391 | Medical Equipment & Supplies Mfg | 240 | -4.1% | 0.4 | \$ 34,528 | 100.0% | 100.0% |
| 5417 | Scientific R & D Svcs | 160 | 6.8% | 0.1 | \$ 32,706 | 100.0% | 100.0% |
| | Health Sciences Totals | 390 | 0.0% | 0.2 | \$ 33,801 | 100.0% | 100.0% |

^{*} Employment rounded to nearest 10. Industry group employment may not add to total for component, due to rounding.

Health Services

Health Services is the largest component of the Health Sciences & Services cluster. Health Services reported almost 21,170 jobs in 2005, an increase of about 1,450 jobs or 7.4% since 2001.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size of firm data was suppressed due to confidentiality, causing a high number of industries to report 100% of their firms with less than 50 or 100 employees than actually exist. "S" means all size of firm data was suppressed for that industry.

Within the cluster, the General Medical & Surgical Hospitals industry provides the most jobs, with almost 6,750 jobs in 2005. This industry experienced a loss of over 540 jobs, down 7.53%, from 2001 to 2005. In contrast, the second largest industry, Offices of Physicians, reported almost 3,580 jobs in 2005, and experienced job growth of over 530 jobs, up 17.5% during the period. This was the largest number of jobs gained by a Health Services industry group during this period. The fastest growth (greatest percentage of growth) was reported by Home Health Care Services, up 83.4%.

Figure 65 shows the employment change from 2001 to 2005 for the five largest Heath Services industries. **Figure 66** shows employment change for the remaining industries. Two charts were used in an effort to make the charts easier to read.

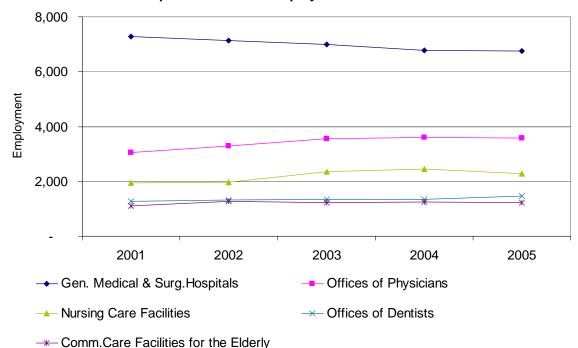


Figure 65 Health Services Top Five Industries Employment 2001-2005

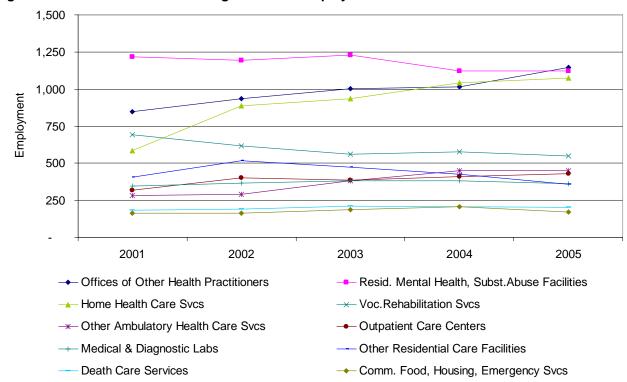


Figure 66 Health Services Remaining Industries Employment 2001-2005

Overall, the region has a higher concentration of Health Services jobs (1.6LQ) than at the statewide level. A number of industries within Health Services have a higher concentration than found statewide. The highest of these are Residential Mental Health & Substance Abuse Facilities (2.1 LQ), Nursing Care Facilities (2.0 LQ), Community Care Facilities for the Elderly (2.0 LQ), Home Health Care Services (1.9 LQ), and Other Ambulatory Health Care Services (1.9 LQ).

The average annual wage for Health Services was \$37,032 in 2005, up 21.1% since 2001. Within Health Services, the Offices of Physicians industry reported the highest average wage of \$49,512, while Vocational Rehabilitation Services reported the lowest average wage of \$17,250.

Figure 67 provides a summary of economic facts for the Health Services industries.

Figure 67 Health Sciences & Services Cluster - Health Services

| NAICS | Industry | 2005 Employmt* | Growth 01-05 | 2005 LQ** | 2005 Avg. Annual Wages | Firms with < 100 Empl*** | Firms with < 50 Empl*** |
|-------|---|-------------------|-----------------|--------------|------------------------------|--------------------------------|-------------------------------|
| 6211 | Offices of Physicians | 3,580 | 17.5% | 1.4 | \$ 49,512 | 99.3% | 98.2% |
| 6212 | Offices of Dentists | 1,460 | 13.9% | 1.2 | \$ 34,313 | 100.0% | 100.0% |
| 6213 | Offices of Other Health Practitioners | 1,140 | 35.1% | 1.8 | \$ 24,912 | 100.0% | 98.2% |
| 6214 | Outpatient Care Centers | 430 | 36.0% | 0.8 | \$ 41,808 | 100.0% | 100.0% |
| 6215 | Medical & Diagnostic Labs | 360 | 4.3% | 1.3 | \$ 40,743 | 100.0% | 100.0% |
| 6216 | Home Health Care Services | 1,070 | 83.4% | 1.9 | \$ 24,736 | 83.9% | 83.9% |
| 6219 | Other Ambulatory Health Care Svcs | 450 | 59.4% | 1.9 | \$ 33,511 | 100.0% | 80.0% |
| 6221 | Gen. Medical & Surgical Hospitals | 6,750 | -7.5% | 1.6 | \$ 47,722 | S | 8 |
| 6222 | Psych. & Subst. Abuse Hospitals | S | 100.0% | S | S | S | S |
| 6223 | Specialty Hospitals | S | 61.5% | S | \$ 38,530 | S | S |
| 6231 | Nursing Care Facilities | 2,280 | 17.3% | 2.0 | \$ 26,095 | 76.7% | 30.0% |
| 6232 | Residential Mental Health & Substance Abuse Facilities | 1,120 | -7.7% | 2.1 | \$ 17,764 | 100.0% | 95.9% |
| 6233 | Community Care Facilities for Elderly | 1,230 | 10.6% | 2.0 | \$ 20,982 | 95.6% | 95.6% |
| 6239 | Other Residential Care Facilities | 360 | -11.3% | 1.7 | \$ 23,005 | 100.0% | 100.0% |
| 6242 | Community Food, Housing, Emergency & Other Relief Svcs | 170 | 3.0% | 1.0 | \$ 21,083 | 100.0% | 100.0% |
| 6243 | Vocational Rehabilitation Services | 550 | -20.5% | 1.4 | \$ 17,250 | 100.0% | 100.0% |
| 8122 | Death Care Services | 200 | 11.5% | 1.8 | \$ 24,605 | 100.0% | 100.0% |
| | Health Services Totals | 21,170 | 7.4% | 1.6 | \$ 37,032 | 97.8% | 94.8% |

^{*} Employment rounded to nearest 100. Numbers may not add due to rounding.

ALL GOVERNMENT

All Government includes federal, state and local government jobs. Jobs in public education are reported in the state and local government sectors. Government jobs also include defense (reported at the federal level), law enforcement, firefighting and public services.

All Government continues to provide the greatest number of jobs for the Northern Sacramento Valley Region, with 38,220 jobs for the region in 2005, or 21.7% of all jobs. From 2001 to 2005, All Government reported job growth of 1,220 jobs, or 3.3%.

Local Government is by far the largest public sector, with 29,760 jobs in 2005. Federal Government reported 2,520 jobs and State Government, reported 5,940 jobs.

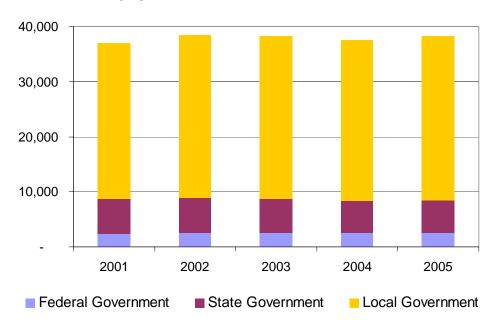
During this period, Local Government (including education) added 1,420 jobs from 2001 to 2005, up 5%. Federal Government (including education) also reported job growth, up 180 jobs, or 7.7%, while State Government reported the loss of 380 jobs (-6%), led by losses in State Government Education jobs.

^{**} LQ (Location Quotient) represents the concentration – the percentage of the region's jobs found in an industry compared to percentage of statewide jobs found in that industry.

^{***} Some size of firm data was suppressed due to confidentiality, causing a high number of industries to report 100% of their firms with less than 50 or 100 employees than actually exist. "S" means all size of firm data was suppressed for that industry.

Figure 68 shows employment change for the federal, state and local public sectors.

Figure 68 All Government Employment 2001-2005



All Government average annual wages include the wages for a broad spectrum of jobs, including elected officials and executive branch, judicial, defense, law enforcement, firefighting, education and other public administration jobs. The sector's average annual wage for the region in 2005 was \$34,604. Within All Government, the average annual wage for Federal Government was \$49,623; the average for State Government was \$30,828; and, the average annual wage for Local Government was \$33,973.

The region has a higher concentration of All Government jobs (1.4 LQ) compared to the statewide level.

Figure 69 shows employment for each level of government from 2001-2005.

Figure 69 All Government

| | 2001 | 2002 | 2003 | 2004 | 2005 |
|----------------------------|--------|--------|--------|--------|--------|
| All Government | 37,000 | 38,480 | 38,350 | 37,540 | 38,220 |
| Federal Government | 2,340 | 2,570 | 2,550 | 2,450 | 2,520 |
| Department of Defense | S | S | S | S | S |
| Other Federal Government | 1,560 | 1,680 | 1,670 | 1,660 | 1,710 |
| State Government | 6,320 | 6,280 | 6,100 | 5,850 | 5,940 |
| State Government Education | 3,200 | 3,200 | 3,000 | 2,800 | 2,800 |
| Other State Government | 3,120 | 3,080 | 3,100 | 3,050 | 800 |
| Local Government | 28,340 | 29,630 | 29,690 | 29,230 | 29,760 |
| Local Government Education | 5,300 | 5,500 | 5,300 | 5,300 | 5,300 |
| Other Local Government | 4,200 | 4,400 | 4,300 | 4,400 | 4,500 |

Source: California Employment Development Department

Some government employment may be suppressed due to confidentiality requirements. "S" means suppressed.

CONCLUSION

The Northern Sacramento Valley Region experienced overall job growth of 3.8% from 2001 to 2005, ranking sixth among the nine regions. At the same time, the population grew by 5.7%. This growth represents, at least in part, people moving to the area for a better quality of life and/or lower cost of living than found in urban areas, whether retiring or continuing to work.

A recent study prepared for the California Regional Economies Project identified the Regional Experience industry cluster that includes a diverse set of quality-of-life related industries, which is becoming increasingly important part of rural California economies. "This cluster generates added value from the unique regional combination of natural, historical, cultural, educational, leisure, and eating, drinking, and shopping experiences. By doing so, it enables the region to attract visitors, residents, and businesses on the basis of distinctive quality rather than lowest cost, which can help improve economic opportunity and wages over time." The report identifies a quality-of-place infrastructure that supports these experiences for residents and visitors, which includes residential, global connections (including high tech connectivity) and community infrastructures.⁷ This cluster provides an opportunity for growth in the future.

Another study shows that entrepreneurialism is very important for this and other rural regions. "Over 80% of net growth in establishments in these rural regions can be attributed to sectors related to regional experience, health, and innovation services."

The Northern Sacramento Valley region is well-poised for future growth and competitiveness, experiencing growth in industries that are important for promoting innovation and entrepreneurship. These include Professional, Scientific & Technical Services and high tech connectivity-related industries. The region's ability to sustain this growth and an innovative culture will be important to its future economic prosperity.

Continuing from the past, it has strengths in agriculture (especially rice farming) and natural-resources-based industries, including wood-related industries and tourism. It also has a major transportation corridor running through it, which is very important for goods movement and also supports the Regional Experience opportunities for its residents and tourists.

At the same time, the region is facing the challenge of providing an adequate workforce for its health services industries in order to meet the health care need of its growing and aging population. Other challenges include maintaining the necessary infrastructures and providing education and job training opportunities for the workforce, in order to support continued economic diversification and growth.

It will be important for policy-makers to respond to these challenges and opportunities in ways that continue to promote innovation and entrepreneurship, take full advantage of growing industry clusters, and allow the workforce to compete for good wages and career advancement opportunities as they strive for a better quality of life.

⁷ Source: California Regional Economies Project, Creating Economic Opportunity and Jobs from Quality of Life Experiences in Rural California (2004)

⁸ Source: California Regional Economies Project, Patterns of Entrepreneurship in Rural California (2005)

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